GenCore version 4.5

OM nucleic - nucleic search, using sw model

Run on: May 17, 2002, 16:30:06 ; Search time 326.88 Seconds
(without alignments)
10583.647 Million cell updates/sec

Title: US-10-007-010-3
Perfect score: 2015
Sequence: 1 cggaggcacggaagatgagg.....atataaatgcaagtcttacg 2015

Scoring table: OLIGO_NUC
Gapop 60.0 , Gapext 60.0

Searched: 1736436 seqs, 858457221 residues

Word size : 0

Total number of hits satisfying chosen parameters: 2057840

Minimum DB seq length: 0
Maximum DB seq length: 105

Post-processing: Listing first 65 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	Result No.	Score	% Query Match	Length	DB	ID	Description
	1	31	1.5	31	22	AAI30734	Human single nucle
	2	31	1.5	31	22	AAI30735	Human single nucle
	3	31	1.5	31	22	AAI30736	Human single nucle
	4	31	1.5	31	22	AAI30737	Human single nucle
	5	31	1.5	31	22	AAI30738	Human single nucle
c	6	27	1.3	33	22	AAH41498	Human tyrosine kin
	7	26	1.3	32	22	AAH41491	Human tyrosine kin
c	8	26	1.3	32	22	AAH41492	Human tyrosine kin
c	9	25	1.2	32	22	AAH41501	Human tyrosine kin
	10	25	1.2	51	23	ABL00375	Human silent nonco
	11	24	1.2	32	22	AAH41500	Human tyrosine kin
	12	24	1.2	78	22	AAC90044	PCR primer used to
	13	21	1.0	21	22	AAF95624	Human gene single
	14	21	1.0	21	22	AAF95625	Human gene single
	15	21	1.0	21	22	AAF95626	Human gene single
	16	21	1.0	21	22	AAF95627	Human gene single
	17	21	1.0	21	22	AAF95628	Human gene single
	18	21	1.0	21	22	AAF95629	Human gene single
	19	21	1.0	21	22	AAF95630	Human gene single
	20	20	1.0	20	16	AAT41207	Human gene signatu
c	21	20	1.0	20	16	AAT41208	Human gene signatu
c	22	19	0.9	51	22	AAL33024	Human SNP oligonuc
c	23	19	0.9	51	22	AAL33025	Human SNP oligonuc
	24	18	0.9	19	21	AAA82879	cdk4 ribozyme bind
	25	18	0.9	19	22	AAH58041	Cell-cycle depende
	26	18	0.9	20	20	AAX29342	Chemically modifie
c	27	18	0.9	20	20	AAX29331	JNK2-specific prob
c	28	18	0.9	20	21	AAC62874	JNK antisense olig
	29	18	0.9	20	21	AAC62885	JNK antisense olig
c	30	18	0.9	20	21	AAA48651	Antisense oligonuc
c	31	18	0.9	20	22	AAH23754	JNK1 antisense oli
c	32	18	0.9	20	22	AAF99183	Immunostimulatory
	33	18	0.9	34	22	AAH41497	Human tyrosine kin
	34	17	0.8	19	21	AAA82878	cdk4 ribozyme bind
	35	17	0.8	19	22	AAH58040	Cell-cycle depende
c	36	17	0.8	20	20	AAX01356	PCR primer for mou
c	37	17	0.8	20	22	AAF72970	Human daxx inhibit
c	38	17	0.8	23	14	AAQ49744	pTK primer pTK2.
c	39	17	0.8	23	16	AAT03086	Protein tyrosine-k
	40	17	0.8	25	21	AAZ37264	PCR primer for SGR
c	41	17	0.8	57	22	AAS04769	Synthetic gene shG
	42	16	0.8	18	22	AAH62905	Shrimp white spot
	43	16	0.8	20	20	AAZ03686	PCR primer used to
c	44	16	0.8	20	20	AAX79186	Human aggrecan amp
	45	16	0.8	22	21	AAC69364	Human ABC1 gene in
c	46	16	0.8	64	19	AAV19448	Oligonucleotide #4
c	47	16	0.8	75	22	ABA72971	Human foetal liver
c	48	16	0.8	75	22	ABA38521	Probe #16987 for g
c	49	16	0.8	75	22	AAK21402	Human brain expres
c	50	16	0.8	75	22	AAK47563	Human bone marrow
c	51	16	0.8	75	22	AAI25979	Probe #15912 for g
c	52	16	0.8	75	22	AAI53395	Probe #22081 used
	53	16	0.8	90	22	AAK44421	Human bone marrow
	54	16	0.8	90	22	AAI50415	Probe #19101 used
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c	58	16	0.8	98	22	AAK17728	Human brain expres
c	59	16	0.8	98	22	AAK43549	Human bone marrow
c	60	16	0.8	98	22	AAI24335	Probe #14268 for g
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ALIGNMENTS

RESULT 1
AAI30734
ID AAI30734 standard; DNA; 31 BP.
XX
AC AAI30734;
XX
DT 18-OCT-2001 (first entry)
XX
DE Human single nucleotide polymorphism (SNP) HCK 1.
XX
KW Human; resequence; genotype; disease; forensic; paternity testing;
KW single nucleotide polymorphism; SNP; ss.

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OS   Homo sapiens.
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FT   Variation       replace(16,T)
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FT                   /standard_name= "single nucleotide polymorphism"
XX
PN   WO200166800-A2.
XX
PD   13-SEP-2001.
XX
PF   07-MAR-2001; 2001WO-US07268.
XX
PR   07-MAR-2000; 2000US-0187510.
PR   22-MAY-2000; 2000US-0206129.
XX
PA   (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX
PI   Cargill M,  Ireland JS,  Lander ES;
XX
DR   WPI; 2001-522952/57.
XX
PT   Nucleic acid molecules from the human genome which include polymorphic
PT   sites, useful in methods for predicting the presence, absence or
PT   severity of a particular phenotype or disorder (e.g. diabetes)
PT   associated with a particular genotype -
XX
PS   Claim 1; Page 104; 145pp; English.
XX
CC   The invention relates to the identification of nucleic acid molecules
CC   (AAI29513-AAI31314) from the human genome which include polymorphic sites
CC   which can predispose individuals to disease. Various genes from a number
CC   of individuals were resequenced and single nucleotide polymorphisms
CC   (SNPs) in these genes discovered. The method is useful for predicting the
CC   presence, absence or severity of a particular phenotype or disorder (e.g.
CC   diabetes) associated with a particular genotype. The nucleic acids
CC   containing the polymorphic sites may be useful in forensics and paternity
CC   testing.
XX
SQ   Sequence 31 BP; 10 A; 9 C; 7 G; 5 T; 0 other;


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AC   AAI30735;
XX
DT   18-OCT-2001  (first entry)
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DE   Human single nucleotide polymorphism (SNP) HCK 2.
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KW   Human; resequence; genotype; disease; forensic; paternity testing;
KW   single nucleotide polymorphism; SNP; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Variation       replace(16,T)
FT                   /*tag= a
FT                   /standard_name= "single nucleotide polymorphism"
XX
PN   WO200166800-A2.
XX
PD   13-SEP-2001.
XX
PF   07-MAR-2001; 2001WO-US07268.
XX
PR   07-MAR-2000; 2000US-0187510.
PR   22-MAY-2000; 2000US-0206129.
XX
PA   (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX
PI   Cargill M,  Ireland JS,  Lander ES;
XX
DR   WPI; 2001-522952/57.
XX
PT   Nucleic acid molecules from the human genome which include polymorphic
PT   sites, useful in methods for predicting the presence, absence or
PT   severity of a particular phenotype or disorder (e.g. diabetes)
PT   associated with a particular genotype -
XX
PS   Claim 1; Page 104; 145pp; English.
XX
CC   The invention relates to the identification of nucleic acid molecules
CC   (AAI29513-AAI31314) from the human genome which include polymorphic sites
CC   which can predispose individuals to disease. Various genes from a number
CC   of individuals were resequenced and single nucleotide polymorphisms
CC   (SNPs) in these genes discovered. The method is useful for predicting the
CC   presence, absence or severity of a particular phenotype or disorder (e.g.
CC   diabetes) associated with a particular genotype. The nucleic acids
CC   containing the polymorphic sites may be useful in forensics and paternity
CC   testing.
XX
SQ   Sequence 31 BP; 8 A; 8 C; 9 G; 6 T; 0 other;


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AC   AAI30736;
XX
DT   18-OCT-2001  (first entry)
XX
DE   Human single nucleotide polymorphism (SNP) HCK 3.
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KW   Human; resequence; genotype; disease; forensic; paternity testing;
KW   single nucleotide polymorphism; SNP; ss.
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OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Variation       replace(16,A)
FT                   /*tag= a
FT                   /standard_name= "single nucleotide polymorphism"
XX
PN   WO200166800-A2.
XX
PD   13-SEP-2001.
XX
PF   07-MAR-2001; 2001WO-US07268.
XX
PR   07-MAR-2000; 2000US-0187510.
PR   22-MAY-2000; 2000US-0206129.
XX
PA   (WHED ) WHITEHEAD INST BIOMEDICAL RES.
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XX
PI   Cargill M,  Ireland JS,  Lander ES;
XX
DR   WPI; 2001-522952/57.
XX
PT   Nucleic acid molecules from the human genome which include polymorphic
PT   sites, useful in methods for predicting the presence, absence or
PT   severity of a particular phenotype or disorder (e.g. diabetes)
PT   associated with a particular genotype -
XX
PS   Claim 1; Page 104; 145pp; English.
XX
CC   The invention relates to the identification of nucleic acid molecules
CC   (AAI29513-AAI31314) from the human genome which include polymorphic sites
CC   which can predispose individuals to disease. Various genes from a number
CC   of individuals were resequenced and single nucleotide polymorphisms
CC   (SNPs) in these genes discovered. The method is useful for predicting the
CC   presence, absence or severity of a particular phenotype or disorder (e.g.
CC   diabetes) associated with a particular genotype. The nucleic acids
CC   containing the polymorphic sites may be useful in forensics and paternity
CC   testing.
XX
SQ   Sequence 31 BP; 6 A; 9 C; 6 G; 10 T; 0 other;


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AC   AAI30737;
XX
DT   18-OCT-2001  (first entry)
XX
DE   Human single nucleotide polymorphism (SNP) HCK 4.
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KW   Human; resequence; genotype; disease; forensic; paternity testing;
KW   single nucleotide polymorphism; SNP; ss.
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OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Variation       replace(16,A)
FT                   /*tag=  a
FT                   /standard_name= "single nucleotide polymorphism"
XX
PN   WO200166800-A2.
XX
PD   13-SEP-2001.
XX
PF   07-MAR-2001; 2001WO-US07268.
XX
PR   07-MAR-2000; 2000US-0187510.
PR   22-MAY-2000; 2000US-0206129.
XX
PA   (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX
PI   Cargill M,  Ireland JS,  Lander ES;
XX
DR   WPI; 2001-522952/57.
XX
PT   Nucleic acid molecules from the human genome which include polymorphic
PT   sites, useful in methods for predicting the presence, absence or
PT   severity of a particular phenotype or disorder (e.g. diabetes)
PT   associated with a particular genotype -
XX
PS   Claim 1; Page 104; 145pp; English.
XX
CC   The invention relates to the identification of nucleic acid molecules
CC   (AAI29513-AAI31314) from the human genome which include polymorphic sites
CC   which can predispose individuals to disease. Various genes from a number
CC   of individuals were resequenced and single nucleotide polymorphisms
CC   (SNPs) in these genes discovered. The method is useful for predicting the
CC   presence, absence or severity of a particular phenotype or disorder (e.g.
CC   diabetes) associated with a particular genotype. The nucleic acids
CC   containing the polymorphic sites may be useful in forensics and paternity
CC   testing.
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AC   AAI30738;
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DT   18-OCT-2001  (first entry)
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DE   Human single nucleotide polymorphism (SNP) HCK 5.
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KW   Human; resequence; genotype; disease; forensic; paternity testing;
KW   single nucleotide polymorphism; SNP; ss.
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OS   Homo sapiens.
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FH   Key             Location/Qualifiers
FT   Variation       replace(16,G)
FT                   /*tag=  a
FT                   /standard_name= "single nucleotide polymorphism"
XX
PN   WO200166800-A2.
XX
PD   13-SEP-2001.
XX
PF   07-MAR-2001; 2001WO-US07268.
XX
PR   07-MAR-2000; 2000US-0187510.
PR   22-MAY-2000; 2000US-0206129.
XX
PA   (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX
PI   Cargill M,  Ireland JS,  Lander ES;
XX
DR   WPI; 2001-522952/57.
XX
PT   Nucleic acid molecules from the human genome which include polymorphic
PT   sites, useful in methods for predicting the presence, absence or
PT   severity of a particular phenotype or disorder (e.g. diabetes)
PT   associated with a particular genotype -
XX
PS   Claim 1; Page 104; 145pp; English.
XX
CC   The invention relates to the identification of nucleic acid molecules
CC   (AAI29513-AAI31314) from the human genome which include polymorphic sites
CC   which can predispose individuals to disease. Various genes from a number
CC   of individuals were resequenced and single nucleotide polymorphisms
CC   (SNPs) in these genes discovered. The method is useful for predicting the
CC   presence, absence or severity of a particular phenotype or disorder (e.g.
```

```
CC   diabetes) associated with a particular genotype. The nucleic acids
CC   containing the polymorphic sites may be useful in forensics and paternity
CC   testing.
XX
SQ   Sequence 31 BP; 12 A; 11 C; 5 G; 3 T; 0 other;


  Query Match             1.5%;  Score 31;  DB 22;  Length 31;
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RESULT   6
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AC   AAH41498;
XX
DT   23-AUG-2001  (first entry)
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KW   Human; tyrosine kinase Hck binding protein; tyrosine kinase; Hck;
KW   tumour lethal factor; tumour necrosis factor alpha; apoptosis; HSB-1;
KW   Hck signal transduction; human immunodeficiency virus; HIV infection;
KW   anticancer; PCR primer; ss.
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OS   Homo sapiens.
XX
PN   WO200132869-A1.
XX
PD   10-MAY-2001.
XX
PF   26-OCT-2000; 2000WO-JP07500.
XX
PR   29-OCT-1999;   99JP-0309957.
XX
PA   (SSSE ) SSP CO LTD.
XX
PI   Taniyama T,  Narita T;
XX
DR   WPI; 2001-316440/33.
XX
PT   New proteins which bind to human tyrosine kinase Hck for promotion of
PT   apoptosis and for the elucidation of the mechanism of Hck signal
PT   transduction -
XX
PS   Example 3; Page 33; 45pp; Japanese.
XX
CC   The present invention describes a protein, designated HSB-1, which binds
CC   to human tyrosine kinase Hck. Also described are: (1) nucleic acids
CC   encoding the protein and its derivatives; (2) recombinant vectors
CC   containing the nucleic acids; and (3) host cells transformed by the
CC   vectors and expressing the protein. HSB-1 has cytostatic activity, binds
CC   tyrosine kinase, enhances tumour necrosis factor alpha and promotes
CC   apoptosis. HSB-1 proteins are used for the elucidation of the mechanism
CC   of Hck signal transduction and of the role of Hck in human
CC   immunodeficiency virus (HIV) infection. They can be used for the
CC   treatment of infections and other diseases with which Hck is associated.
CC   They promote the anticancer activity of tumour necrosis factor alpha.
CC   The present sequence represents a PCR primer for the human tyrosine
CC   kinase Hck, which is used in an example from the present invention.
XX
SQ   Sequence 33 BP; 2 A; 8 C; 11 G; 12 T; 0 other;


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RESULT   7
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AC   AAH41491;
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DT   23-AUG-2001  (first entry)
XX
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XX
KW   Human; tyrosine kinase Hck binding protein; tyrosine kinase; Hck;
KW   tumour lethal factor; tumour necrosis factor alpha; apoptosis; HSB-1;
KW   Hck signal transduction; human immunodeficiency virus; HIV infection;
KW   anticancer; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200132869-A1.
XX
PD   10-MAY-2001.
XX
PF   26-OCT-2000; 2000WO-JP07500.
XX
PR   29-OCT-1999;   99JP-0309957.
XX
PA   (SSSE ) SSP CO LTD.
XX
PI   Taniyama T,  Narita T;
XX
DR   WPI; 2001-316440/33.
XX
PT   New proteins which bind to human tyrosine kinase Hck for promotion of
PT   apoptosis and for the elucidation of the mechanism of Hck signal
PT   transduction -
XX
PS   Example 1; Page 30; 45pp; Japanese.
XX
CC   The present invention describes a protein, designated HSB-1, which binds
CC   to human tyrosine kinase Hck. Also described are: (1) nucleic acids
CC   encoding the protein and its derivatives; (2) recombinant vectors
CC   containing the nucleic acids; and (3) host cells transformed by the
CC   vectors and expressing the protein. HSB-1 has cytostatic activity, binds
CC   tyrosine kinase, enhances tumour necrosis factor alpha and promotes
CC   apoptosis. HSB-1 proteins are used for the elucidation of the mechanism
CC   of Hck signal transduction and of the role of Hck in human
CC   immunodeficiency virus (HIV) infection. They can be used for the
CC   treatment of infections and other diseases with which Hck is associated.
CC   They promote the anticancer activity of tumour necrosis factor alpha.
CC   The present sequence represents a PCR primer used in the cloning of
CC   HSB-1, which is used in an example from the present invention.
XX
SQ   Sequence 32 BP; 8 A; 5 C; 9 G; 10 T; 0 other;


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RESULT   8
AAH41492/c
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KW   tumour lethal factor; tumour necrosis factor alpha; apoptosis; HSB-1;
KW   Hck signal transduction; human immunodeficiency virus; HIV infection;
KW   anticancer; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200132869-A1.
XX
PD   10-MAY-2001.
XX
PF   26-OCT-2000; 2000WO-JP07500.
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PR   29-OCT-1999;   99JP-0309957.
XX
PA   (SSSE ) SSP CO LTD.
XX
PI   Taniyama T,  Narita T;
XX
DR   WPI; 2001-316440/33.
XX
PT   New proteins which bind to human tyrosine kinase Hck for promotion of
PT   apoptosis and for the elucidation of the mechanism of Hck signal
PT   transduction  -
XX
PS   Example 1; Page 31; 45pp; Japanese.
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CC   encoding the protein and its derivatives; (2) recombinant vectors
CC   containing the nucleic acids; and (3) host cells transformed by the
CC   vectors and expressing the protein. HSB-1 has cytostatic activity, binds
CC   tyrosine kinase, enhances tumour necrosis factor alpha and promotes
CC   apoptosis. HSB-1 proteins are used for the elucidation of the mechanism
CC   of Hck signal transduction and of the role of Hck in human
CC   immunodeficiency virus (HIV) infection. They can be used for the
CC   treatment of infections and other diseases with which Hck is associated.
CC   They promote the anticancer activity of tumour necrosis factor alpha.
CC   The present sequence represents a PCR primer used in the cloning of
CC   HSB-1, which is used in an example from the present invention.
XX
SQ   Sequence 32 BP; 7 A; 10 C; 9 G; 6 T; 0 other;
```

```
  Query Match             1.3%;  Score 26;  DB 22;  Length 32;
  Best Local Similarity   100.0%;  Pred. No. 0.022;
  Matches   26;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    796 gacgggctctgccagaaactgtcggt 821
          ||||||||||||||||||||||||||
Db     32 GACGGGCTCTGCCAGAAACTGTCGGT 7
```

```
RESULT   9
AAH41501/c
ID   AAH41501 standard; DNA; 32 BP.
XX
AC   AAH41501;
XX
DT   23-AUG-2001  (first entry)
XX
DE   Human tyrosine kinase Hck binding protein cloning PCR primer SEQ:15.
XX
KW   Human; tyrosine kinase Hck binding protein; tyrosine kinase; Hck;
KW   tumour lethal factor; tumour necrosis factor alpha; apoptosis; HSB-1;
KW   Hck signal transduction; human immunodeficiency virus; HIV infection;
KW   anticancer; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200132869-A1.
XX
PD   10-MAY-2001.
XX
PF   26-OCT-2000; 2000WO-JP07500.
XX
PR   29-OCT-1999;   99JP-0309957.
XX
PA   (SSSE ) SSP CO LTD.
XX
PI   Taniyama T,  Narita T;
XX
DR   WPI; 2001-316440/33.
XX
PT   New proteins which bind to human tyrosine kinase Hck for promotion of
PT   apoptosis and for the elucidation of the mechanism of Hck signal
PT   transduction  -
XX
PS   Example 4; Page 41; 45pp; Japanese.
XX
CC   The present invention describes a protein, designated HSB-1, which binds
CC   to human tyrosine kinase Hck. Also described are: (1) nucleic acids
CC   encoding the protein and its derivatives; (2) recombinant vectors
CC   containing the nucleic acids; and (3) host cells transformed by the
CC   vectors and expressing the protein. HSB-1 has cytostatic activity, binds
CC   tyrosine kinase, enhances tumour necrosis factor alpha and promotes
CC   apoptosis. HSB-1 proteins are used for the elucidation of the mechanism
CC   of Hck signal transduction and of the role of Hck in human
CC   immunodeficiency virus (HIV) infection. They can be used for the
CC   treatment of infections and other diseases with which Hck is associated.
CC   They promote the anticancer activity of tumour necrosis factor alpha.
CC   The present sequence represents a PCR primer used in the cloning of
CC   HSB-1, which is used in an example from the present invention.
XX
SQ   Sequence 32 BP; 8 A; 9 C; 10 G; 5 T; 0 other;
```

```
  Query Match             1.2%;  Score 25;  DB 22;  Length 32;
  Best Local Similarity   100.0%;  Pred. No. 0.068;
  Matches   25;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    505 gcccgcgttgactctctggagacag 529
          |||||||||||||||||||||||||
Db     32 GCCCGCGTTGACTCTCTGGAGACAG 8
```

```
RESULT  10
ABL00375
ID   ABL00375 standard; DNA; 51 BP.
XX
AC   ABL00375;
XX
DT   05-MAR-2002  (first entry)
XX
DE   Human silent noncoding SNP oligonucleotide SEQ ID NO:366.
XX
KW   Human; single nucleotide polymorphism; SNP; polymorphism; cytostatic;
KW   immunosuppressive; antiinflammatory; neuroprotective; antimicrobial;
KW   autoimmune disease; inflammation; cancer; nervous system disease;
KW   infection; polymorphic protein; ds.
XX
OS   Homo sapiens.
XX
PN   WO200138586-A2.
XX
PD   31-MAY-2001.
XX
PF   22-NOV-2000; 2000WO-US32311.
XX
PR   24-NOV-1999;   99US-0167383.
```

XX
PA (CURA-) CURAGEN CORP.
XX
PI Shimkets RA, Leach M;
XX
DR WPI; 2001-355949/37.
XX
PT Isolated human nucleic acids comprising one or more single nucleotide
PT polymorphisms, useful for treating a subject suffering from a
PT pathology, e.g. autoimmune diseases, ascribed to the presence of a
PT sequence polymorphism -
XX
PS Claim 1; Page 359; 674pp; English.
XX
CC ABL00010 to ABL01104 represent human nucleic acid oligonucleotides
CC comprising one or more single nucleotide polymorphisms (SNPs). ABB56531
CC to ABB56903 represent human peptides encoded by some of the SNP
CC oligonucleotides. The sequences from the present invention can have
CC immunosuppressive, cytostatic, antiinflammatory, neuroprotective and
CC antimicrobial activities. Nucleic acids, polypeptides, oligonucleotides
CC and antibodies from the present invention can be used for treating a
CC subject suffering from, at risk for, or suspected of, suffering from a
CC pathology ascribed to the presence of a sequence polymorphism. The
CC pathology may be autoimmune diseases, inflammation, cancer, diseases of
CC the nervous system, and infection by pathogenic microorganisms. The SNPs
CC are also useful for determining which forms of a characterised
CC polymorphism are present in individuals. The antibodies may be used in
CC the detection, quantitation and/or cellular or tissue localisation of a
CC polymorphic protein (e.g., for use in measuring levels of the
CC* polymorphic protein within appropriate physiological samples).
XX
SQ Sequence 51 BP; 10 A; 17 C; 13 G; 11 T; 0 other;

Query Match 1.2%; Score 25; DB 23; Length 51;
Best Local Similarity 100.0%; Pred. No. 0.068;
Matches 25; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 722 ggggcttctacatatccccccgaag 746
||||||||||||||||||||||||||
Db 1 ggggcttctacatatccccccgaag 25

RESULT 11
AAH41500
ID AAH41500 standard; DNA; 32 BP.
XX
AC AAH41500;
XX
DT 23-AUG-2001 (first entry)
XX
DE Human tyrosine kinase Hck binding protein cloning PCR primer SEQ:14.
XX
KW Human; tyrosine kinase Hck binding protein; tyrosine kinase; Hck;
KW tumour lethal factor; tumour necrosis factor alpha; apoptosis; HSB-1;
KW Hck signal transduction; human immunodeficiency virus; HIV infection;
KW anticancer; PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200132869-A1.
XX
PD 10-MAY-2001.
XX
PF 26-OCT-2000; 2000WO-JP07500.
XX
PR 29-OCT-1999; 99JP-0309957.
XX
PA (SSSE) SSP CO LTD.
XX
PI Taniyama T, Narita T;
XX
DR WPI; 2001-316440/33.
XX
PT New proteins which bind to human tyrosine kinase Hck for promotion of
PT apoptosis and for the elucidation of the mechanism of Hck signal
PT transduction -
XX
PS Example 4; Page 41; 45pp; Japanese.
XX
CC The present invention describes a protein, designated HSB-1, which binds
CC to human tyrosine kinase Hck. Also described are: (1) nucleic acids
CC encoding the protein and its derivatives; (2) recombinant vectors
CC containing the nucleic acids; and (3) host cells transformed by the
CC vectors and expressing the protein. HSB-1 has cytostatic activity, binds
CC tyrosine kinase, enhances tumour necrosis factor alpha and promotes
CC apoptosis. HSB-1 proteins are used for the elucidation of the mechanism
CC of Hck signal transduction and of the role of Hck in human
CC immunodeficiency virus (HIV) infection. They can be used for the
CC treatment of infections and other diseases with which Hck is associated.
CC They promote the anticancer activity of tumour necrosis factor alpha.
CC The present sequence represents a PCR primer used in the cloning of
CC HSB-1, which is used in an example from the present invention.
XX
SQ Sequence 32 BP; 9 A; 4 C; 10 G; 9 T; 0 other;

Query Match 1.2%; Score 24; DB 22; Length 32;
Best Local Similarity 100.0%; Pred. No. 0.21;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 529 gaggagtggtttttcaagggcatc 552
||||||||||||||||||||||||
Db 9 gaggagtggtttttcaagggcatc 32

RESULT 12
AAC90044
ID AAC90044 standard; DNA; 78 BP.
XX
AC AAC90044;
XX
DT 13-MAR-2001 (first entry)
XX
DE PCR primer used to create a library of RRT-Hck SH3 domains.
XX
KW SH3 domain; human; Src homology region 3 domain; RT-loop; Hck protein;
KW PCR primer; ss.
XX
OS Homo sapiens.
XX
PN WO200072742-A2.
XX
PD 07-DEC-2000.
XX
PF 26-MAY-2000; 2000WO-FI00477.
XX
PR 26-MAY-1999; 99US-0136085.
XX
PA (SAKS/) SAKSELA K.
XX
PI Saksela K, Hiipakka M;
XX
DR WPI; 2001-061424/07.
XX
PT A method for generating Src homology region 3 (SH3) domains with
PT tailored binding properties or artificial SH3 domains, comprises
PT employing random manipulation of the SH3 RT-loop sequence -
XX
PS Example 1; Page 10; 34pp; English.
XX
CC The present invention relates to a method for generating Src homology
CC region 3 (SH3) domains with tailored binding properties. The method
CC comprises producing a collection of SH3 domains containing a randomised
CC RT-loop (RRT-SH3 domains). Human p59 Hck was used in the present
CC invention as the SH3 domain. The present sequence is a PCR primer, which

CC was used to create a library of RRT-Hck SH3 domains. The generated SH3
CC domains are useful for inhibiting, activating or modifying the functions
CC of cellular or pathogen-encoded proteins for research or therapeutic
CC purposes.
XX
SQ Sequence 78 BP; 13 A; 13 C; 17 G; 17 T; 18 other;

Query Match 1.2%; Score 24; DB 22; Length 78;
Best Local Similarity 100.0%; Pred. No. 0.21;
Matches 24; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 391 gacctcagcttccagaaggggac 414
||||||||||||||||||||||||
Db 55 gacctcagcttccagaaggggac 78

RESULT 13
AAF95624
ID AAF95624 standard; DNA; 21 BP.
XX
AC AAF95624;
XX
DT 06-JUN-2001 (first entry)
XX
DE Human gene single nucleotide polymorphism #385.
XX
KW Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
KW polymorphism; vascular disease; coronary artery disease; forensics;
KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
KW pulmonary embolism; paternity test; ds.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Variation replace(11,C)
FT /*tag= a
FT /standard_name= "single nucleotide polymorphism"
XX
PN WO200118250-A2.
XX
PD 15-MAR-2001.
XX
PF 07-SEP-2000; 2000WO-US24503.
XX
PR 10-SEP-1999; 99US-0153357.
PR 26-JUL-2000; 2000US-0220947.
PR 16-AUG-2000; 2000US-0225724.
XX
PA (WHED) WHITEHEAD INST BIOMEDICAL RES.
PA (MILL-) MILLENNIUM PHARM INC.
XX
PI Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, McCarthy JJ;
XX
DR WPI; 2001-226749/23.
XX
PT Nucleic acids comprising single nucleotide polymorphisms, useful in
PT applications such as forensics, paternity testing, medicine, genetic
PT analysis and phenotype correlations to diseases such as diabetes and
PT atherosclerosis -
XX
PS Examples; Page 75; 242pp; English.
XX
CC The present invention provides a method of diagnosing a vascular disease
CC in an individual, involving determining the sequence at various
CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4
CC genes. The sequences at a number of polymorphic sites are also provided
CC in the specification. In particular, the method can be used in the
CC diagnosis of atherosclerosis, myocardial infarction, coronary heart
CC disease, stroke, peripheral vascular diseases, venous thromboembolism
CC and pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
CC useful in forensics, paternity testing, genetic analysis and phenotype
CC correlations to diseases. The present sequence is an example of one of
CC the human gene SNPS shown in the specification.
XX
SQ Sequence 21 BP; 3 A; 7 C; 6 G; 5 T; 0 other;

Query Match 1.0%; Score 21; DB 22; Length 21;
Best Local Similarity 100.0%; Pred. No. 6.3;
Matches 21; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 507 ccgcgttgactctctggagac 527
|||||||||||||||||||||
Db 1 ccgcgttgactctctggagac 21

RESULT 14
AAF95625
ID AAF95625 standard; DNA; 21 BP.
XX
AC AAF95625;
XX
DT 06-JUN-2001 (first entry)
XX
DE Human gene single nucleotide polymorphism #386.
XX
KW Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
KW polymorphism; vascular disease; coronary artery disease; forensics;
KW myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
KW pulmonary embolism; paternity test; ds.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Variation replace(11,T)
FT /*tag= a
FT /standard_name= "single nucleotide polymorphism"
XX
PN WO200118250-A2.
XX
PD 15-MAR-2001.
XX
PF 07-SEP-2000; 2000WO-US24503.
XX
PR 10-SEP-1999; 99US-0153357.
PR 26-JUL-2000; 2000US-0220947.
PR 16-AUG-2000; 2000US-0225724.
XX
PA (WHED) WHITEHEAD INST BIOMEDICAL RES.
PA (MILL-) MILLENNIUM PHARM INC.
XX
PI Lander ES, Gargill M, Ireland JS, Bolk S, Daley GQ, McCarthy JJ;
XX
DR WPI; 2001-226749/23.
XX
PT Nucleic acids comprising single nucleotide polymorphisms, useful in
PT applications such as forensics, paternity testing, medicine, genetic
PT analysis and phenotype correlations to diseases such as diabetes and
PT atherosclerosis -
XX
PS Examples; Page 75; 242pp; English.
XX
CC The present invention provides a method of diagnosing a vascular disease
CC in an individual, involving determining the sequence at various
CC polymorphic sites within the human thrombospondin 1 and thrombospondin 4
CC genes. The sequences at a number of polymorphic sites are also provided
CC in the specification. In particular, the method can be used in the
CC diagnosis of atherosclerosis, myocardial infarction, coronary heart
CC disease, stroke, peripheral vascular diseases, venous thromboembolism
CC and pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
CC useful in forensics, paternity testing, genetic analysis and phenotype
CC correlations to diseases. The present sequence is an example of one of
CC the human gene SNPS shown in the specification.
XX
SQ Sequence 21 BP; 8 A; 4 C; 7 G; 2 T; 0 other;

```
  Query Match             1.0%;  Score 21;  DB 22;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 6.3;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    773 tggaccactacaagaagggga 793
          |||||||||||||||||||||
Db      1 tggaccactacaagaagggga 21


RESULT  15
AAF95626
ID   AAF95626 standard; DNA; 21 BP.
XX
AC   AAF95626;
XX
DT   06-JUN-2001  (first entry)
XX
DE   Human gene single nucleotide polymorphism #387.
XX
KW   Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
KW   polymorphism; vascular disease; coronary artery disease; forensics;
KW   myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
KW   pulmonary embolism; paternity test; ds.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Variation       replace(11,C)
FT                   /*tag=  a
FT                   /standard_name= "single nucleotide polymorphism"
XX
PN   WO200118250-A2.
XX
PD   15-MAR-2001.
XX
PF   07-SEP-2000; 2000WO-US24503.
XX
PR   10-SEP-1999;   99US-0153357.
PR   26-JUL-2000; 2000US-0220947.
PR   16-AUG-2000; 2000US-0225724.
XX
PA   (WHED ) WHITEHEAD INST BIOMEDICAL RES.
PA   (MILL-) MILLENNIUM PHARM INC.
XX
PI   Lander ES,  Gargill M,  Ireland JS,  Bolk S,  Daley GQ,  McCarthy JJ;
XX
DR   WPI; 2001-226749/23.
XX
PT   Nucleic acids comprising single nucleotide polymorphisms, useful in
PT   applications such as forensics, paternity testing, medicine, genetic
PT   analysis and phenotype correlations to diseases such as diabetes and
PT   atherosclerosis -
XX
PS   Examples; Page 75; 242pp; English.
XX
CC   The present invention provides a method of diagnosing a vascular disease
CC   in an individual, involving determining the sequence at various
CC   polymorphic sites within the human thrombospondin 1 and thrombospondin 4
CC   genes. The sequences at a number of polymorphic sites are also provided
CC   in the specification. In particular, the method can be used in the
CC   diagnosis of atherosclerosis, myocardial infarction, coronary heart
CC   disease, stroke, peripheral vascular diseases, venous thromboembolism
CC   and pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
CC   useful in forensics, paternity testing, genetic analysis and phenotype
CC   correlations to diseases. The present sequence is an example of one of
CC   the human gene SNPS shown in the specification.
XX
SQ   Sequence 21 BP; 2 A; 5 C; 6 G; 8 T; 0 other;


  Query Match             1.0%;  Score 21;  DB 22;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 6.3;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    347 tcatcgtggttgccctgtatg 367
          |||||||||||||||||||||
Db      1 tcatcgtggttgccctgtatg 21


RESULT  16
AAF95627
ID   AAF95627 standard; DNA; 21 BP.
XX
AC   AAF95627;
XX
DT   06-JUN-2001  (first entry)
XX
DE   Human gene single nucleotide polymorphism #388.
XX
KW   Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
KW   polymorphism; vascular disease; coronary artery disease; forensics;
KW   myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
KW   pulmonary embolism; paternity test; ds.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Variation       replace(11,T)
FT                   /*tag=  a
FT                   /standard_name= "single nucleotide polymorphism"
XX
PN   WO200118250-A2.
XX
PD   15-MAR-2001.
XX
PF   07-SEP-2000; 2000WO-US24503.
XX
PR   10-SEP-1999;   99US-0153357.
PR   26-JUL-2000; 2000US-0220947.
PR   16-AUG-2000; 2000US-0225724.
XX
PA   (WHED ) WHITEHEAD INST BIOMEDICAL RES.
PA   (MILL-) MILLENNIUM PHARM INC.
XX
PI   Lander ES,  Gargill M,  Ireland JS,  Bolk S,  Daley GQ,  McCarthy JJ;
XX
DR   WPI; 2001-226749/23.
XX
PT   Nucleic acids comprising single nucleotide polymorphisms, useful in
PT   applications such as forensics, paternity testing, medicine, genetic
PT   analysis and phenotype correlations to diseases such as diabetes and
PT   atherosclerosis -
XX
PS   Examples; Page 75; 242pp; English.
XX
CC   The present invention provides a method of diagnosing a vascular disease
CC   in an individual, involving determining the sequence at various
CC   polymorphic sites within the human thrombospondin 1 and thrombospondin 4
CC   genes. The sequences at a number of polymorphic sites are also provided
CC   in the specification. In particular, the method can be used in the
CC   diagnosis of atherosclerosis, myocardial infarction, coronary heart
CC   disease, stroke, peripheral vascular diseases, venous thromboembolism
CC   and pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
CC   useful in forensics, paternity testing, genetic analysis and phenotype
CC   correlations to diseases. The present sequence is an example of one of
CC   the human gene SNPS shown in the specification.
XX
SQ   Sequence 21 BP; 7 A; 9 C; 2 G; 3 T; 0 other;


  Query Match             1.0%;  Score 21;  DB 22;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 6.3;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;
```

```
Qy    377 ccattcaccacgaagacctca 397
          ||||||||||||||||||||
Db      1 ccattcaccacgaagacctca 21
```

```
RESULT  17
AAF95628
ID   AAF95628 standard; DNA; 21 BP.
XX
AC   AAF95628;
XX
DT   06-JUN-2001  (first entry)
XX
DE   Human gene single nucleotide polymorphism #389.
XX
KW   Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
KW   polymorphism; vascular disease; coronary artery disease; forensics;
KW   myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
KW   pulmonary embolism; paternity test; ds.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Variation       replace(11,G)
FT                   /*tag=  a
FT                   /standard_name= "single nucleotide polymorphism"
XX
PN   WO200118250-A2.
XX
PD   15-MAR-2001.
XX
PF   07-SEP-2000; 2000WO-US24503.
XX
PR   10-SEP-1999;   99US-0153357.
PR   26-JUL-2000; 2000US-0220947.
RR   16-AUG-2000; 2000US-0225724.
XX
PA   (WHED ) WHITEHEAD INST BIOMEDICAL RES.
PA   (MILL-) MILLENNIUM PHARM INC.
XX
RI   Lander ES,  Gargill M,  Ireland JS,  Bolk S,  Daley GQ,  McCarthy JJ;
XX
DR   WPI; 2001-226749/23.
XX
PT   Nucleic acids comprising single nucleotide polymorphisms, useful in
PT   applications such as forensics, paternity testing, medicine, genetic
PT   analysis and phenotype correlations to diseases such as diabetes and
PT   atherosclerosis -
XX
PS   Examples; Page 75; 242pp; English.
XX
CC   The present invention provides a method of diagnosing a vascular disease
CC   in an individual, involving determining the sequence at various
CC   polymorphic sites within the human thrombospondin 1 and thrombospondin 4
CC   genes. The sequences at a number of polymorphic sites are also provided
CC   in the specification. In particular, the method can be used in the
CC   diagnosis of atherosclerosis, myocardial infarction, coronary heart
CC   disease, stroke, peripheral vascular diseases, venous thromboembolism
CC   and pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
CC   useful in forensics, paternity testing, genetic analysis and phenotype
CC   correlations to diseases. The present sequence is an example of one of
CC   the human gene SNPS shown in the specification.
XX
SQ   Sequence 21 BP; 4 A; 8 C; 8 G; 1 T; 0 other;
```

```
  Query Match             1.0%;  Score 21;  DB 22;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 6.3;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    461 ccctggccacccggaaggagg 481
          |||||||||||||||||||||
Db      1 ccctggccacccggaaggagg 21
```

```
RESULT  18
AAF95629
ID   AAF95629 standard; DNA; 21 BP.
XX
AC   AAF95629;
XX
DT   06-JUN-2001  (first entry)
XX
DE   Human gene single nucleotide polymorphism #390.
XX
KW   Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
KW   polymorphism; vascular disease; coronary artery disease; forensics;
KW   myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
KW   pulmonary embolism; paternity test; ds.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Variation       replace(11,T)
FT                   /*tag=  a
FT                   /standard_name= "single nucleotide polymorphism"
XX
PN   WO200118250-A2.
XX
PD   15-MAR-2001.
XX
PF   07-SEP-2000; 2000WO-US24503.
XX
PR   10-SEP-1999;   99US-0153357.
PR   26-JUL-2000; 2000US-0220947.
PR   16-AUG-2000; 2000US-0225724.
XX
PA   (WHED ) WHITEHEAD INST BIOMEDICAL RES.
PA   (MILL-) MILLENNIUM PHARM INC.
XX
PI   Lander ES,  Gargill M,  Ireland JS,  Bolk S,  Daley GQ,  McCarthy JJ;
XX
DR   WPI; 2001-226749/23.
XX
PT   Nucleic acids comprising single nucleotide polymorphisms, useful in
PT   applications such as forensics, paternity testing, medicine, genetic
PT   analysis and phenotype correlations to diseases such as diabetes and
PT   atherosclerosis -
XX
PS   Examples; Page 75; 242pp; English.
XX
CC   The present invention provides a method of diagnosing a vascular disease
CC   in an individual, involving determining the sequence at various
CC   polymorphic sites within the human thrombospondin 1 and thrombospondin 4
CC   genes. The sequences at a number of polymorphic sites are also provided
CC   in the specification. In particular, the method can be used in the
CC   diagnosis of atherosclerosis, myocardial infarction, coronary heart
CC   disease, stroke, peripheral vascular diseases, venous thromboembolism
CC   and pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
CC   useful in forensics, paternity testing, genetic analysis and phenotype
CC   correlations to diseases. The present sequence is an example of one of
CC   the human gene SNPS shown in the specification.
XX
SQ   Sequence 21 BP; 4 A; 11 C; 4 G; 2 T; 0 other;
```

```
  Query Match             1.0%;  Score 21;  DB 22;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 6.3;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    230 ccagcgccagcccacactgtc 250
          |||||||||||||||||||||
Db      1 ccagcgccagcccacactgtc 21
```

RESULT 19

```
AAF95630
ID   AAF95630 standard; DNA; 21 BP.
XX
AC   AAF95630;
XX
DT   06-JUN-2001  (first entry)
XX
DE   Human gene single nucleotide polymorphism #391.
XX
KW   Human; variant thrombospondin 1; variant thrombospondin 4; SNP;
KW   polymorphism; vascular disease; coronary artery disease; forensics;
KW   myocardial infarction; atherosclerosis; stroke; venous thromboembolism;
KW   pulmonary embolism; paternity test; ds.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Variation       replace(11,T)
FT                   /*tag= a
FT                   /standard_name= "single nucleotide polymorphism"
XX
PN   WO200118250-A2.
XX
PD   15-MAR-2001.
XX
PF   07-SEP-2000; 2000WO-US24503.
XX
PR   10-SEP-1999;   99US-0153357.
PR   26-JUL-2000; 2000US-0220947.
PR   16-AUG-2000; 2000US-0225724.
XX
PA   (WHED ) WHITEHEAD INST BIOMEDICAL RES.
PA   (MILL-) MILLENNIUM PHARM INC.
XX
PI   Lander ES,  Gargill M,  Ireland JS,  Bolk S,  Daley GQ,  McCarthy JJ;
XX
DR   WPI; 2001-226749/23.
XX
PT   Nucleic acids comprising single nucleotide polymorphisms, useful in
PT   applications such as forensics, paternity testing, medicine, genetic
PT   analysis and phenotype correlations to diseases such as diabetes and
PT   atherosclerosis -
XX
PS   Examples; Page 75; 242pp; English.
XX
CC   The present invention provides a method of diagnosing a vascular disease
CC   in an individual, involving determining the sequence at various
CC   polymorphic sites within the human thrombospondin 1 and thrombospondin 4
CC   genes. The sequences at a number of polymorphic sites are also provided
CC   in the specification. In particular, the method can be used in the
CC   diagnosis of atherosclerosis, myocardial infarction, coronary heart
CC   disease, stroke, peripheral vascular diseases, venous thromboembolism
CC   and pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also
CC   useful in forensics, paternity testing, genetic analysis and phenotype
CC   correlations to diseases. The present sequence is an example of one of
CC   the human gene SNPS shown in the specification.
XX
SQ   Sequence 21 BP; 6 A; 9 C; 3 G; 3 T; 0 other;


  Query Match             1.0%;  Score 21;  DB 22;  Length 21;
  Best Local Similarity   100.0%;  Pred. No. 6.3;
  Matches   21;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    384 ccacgaagacctcagcttcca 404
          ||||||||||||||||||||
Db      1 ccacgaagacctcagcttcca 21


RESULT  20
AAT41207
ID   AAT41207 standard; DNA; 20 BP.
XX
AC   AAT41207;
XX
DT   03-DEC-1996  (first entry)
XX
DE   Human gene signature HUMGS01089-derived sense primer.
XX
KW   Gene signature; messenger RNA; mRNA; relative abundance; frequency;
KW   human; cloning; mapping; non-biased library; diagnosis; detection;
KW   cell typing; abnormal cell function; primer; PCR; amplification;
KW   polymerase chain reaction; ss.
XX
OS   Synthetic.
XX
PN   WO9514772-A1.
XX
PD   01-JUN-1995.
XX
PF   11-NOV-1994;   94WO-JP01916.
XX
PR   12-NOV-1993;   93JP-0355504.
XX
PA   (MATS/) MATSUBARA K.
PA   (OKUB/) OKUBO K.
XX
PI   Matsubara K,  Okubo K;
XX
DR   WPI; 1995-206931/27.
XX
PT   Identifying gene signatures in 3'-directed human cDNA library - e.g.
PT   for diagnosis of abnormal cell function, by preparing cDNA that
PT   reflects relative abundance of corresp. mRNA in specific human
PT   tissues
XX
PS   Example 7; Fig 8; 2245pp; Japanese.
XX
CC   Primers T41001-T41382 are derived from novel human gene signature (GS)
CC   sequences which did not match with sequences deposited in Genbank release
CC   76.  The GS sequences (T19001-T26837) were obtained from 3'-directed cDNA
CC   libraries prepared from various human tissues; synthesis of cDNA was
CC   initiated from the 3'-end of mRNA by using poly(T) as the sole primer.
CC   Each library is constructed so as to reflect accurately the relative
CC   abundance of different mRNAs in the particular tissue from which it was
CC   derived.  The appearance frequency of a given GS in a cDNA library can be
CC   determined (esp. using primers and probes derived from the GS sequences)
CC   as a means of diagnosing abnormal cell function or for recognising
CC   different cell types. The primers T41207-8 amplify clone pm0112 which
CC   comprises the GS HUMGS001089 (T20089), located on chromosome 20.
XX
SQ   Sequence 20 BP; 4 A; 5 C; 5 G; 6 T; 0 other;


  Query Match             1.0%;  Score 20;  DB 16;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 19;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy   1634 tgctggatgacttctacacg 1653
          ||||||||||||||||||||
Db      1 tgctggatgacttctacacg 20


RESULT  21
AAT41208/c
ID   AAT41208 standard; DNA; 20 BP.
XX
AC   AAT41208;
XX
DT   03-DEC-1996  (first entry)
XX
DE   Human gene signature HUMGS01089-derived anti-sense primer.
XX
KW   Gene signature; messenger RNA; mRNA; relative abundance; frequency;
KW   human; cloning; mapping; non-biased library; diagnosis; detection;
KW   cell typing; abnormal cell function; primer; PCR; amplification;
```

```
KW   polymerase chain reaction; ss.
XX
OS   Synthetic.
XX
PN   WO9514772-A1.
XX
PD   01-JUN-1995.
XX
PF   11-NOV-1994;   94WO-JP01916.
XX
PR   12-NOV-1993;   93JP-0355504.
XX
PA   (MATS/) MATSUBARA K.
PA   (OKUB/) OKUBO K.
XX
PI   Matsubara K,  Okubo K;
XX
DR   WPI; 1995-206931/27.
XX
PT   Identifying gene signatures in 3'-directed human cDNA library - e.g.
PT   for diagnosis of abnormal cell function, by preparing cDNA that
PT   reflects relative abundance of corresp. mRNA in specific human
PT   tissues
XX
PS   Example 7; Fig 8; 2245pp; Japanese.
XX
CC   Primers T41001-T41382 are derived from novel human gene signature (GS)
CC   sequences which did not match with sequences deposited in Genbank release
CC   76.  The GS sequences (T19001-T26837) were obtained from 3'-directed cDNA
CC   libraries prepared from various human tissues; synthesis of cDNA was
CC   initiated from the 3'-end of mRNA by using poly(T) as the sole primer.
CC   Each library is constructed so as to reflect accurately the relative
CC   abundance of different mRNAs in the particular tissue from which it was
CC   derived.  The appearance frequency of a given GS in a cDNA library can be
CC   determined (esp. using primers and probes derived from the GS sequences)
CC   as a means of diagnosing abnormal cell function or for recognising
CC   different cell types. The primers T41207-8 amplify clone pm0112 which
CC   comprises the GS HUMGS001089 (T20089), located on chromosome 20.
XX
SQ   Sequence 20 BP; 2 A; 6 C; 4 G; 8 T; 0 other;

  Query Match             1.0%;  Score 20;  DB 16;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 19;
  Matches   20;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy   1673 aacagcagccatgataggga 1692
           ||||||||||||||||||||
Db     20 AACAGCAGCCATGATAGGGA 1


RESULT  22
AAL33024/c
ID   AAL33024 standard; DNA; 51 BP.
XX
AC   AAL33024;
XX
DT   24-JAN-2002  (first entry)
XX
DE   Human SNP oligonucleotide #6232.
XX
KW   Immunosuppressive; immunostimulatory; antiinflammatory; cytostatic;
KW   neuroprotective; antimicrobial; gene therapy; vaccine; amylase; cancer;
KW   amyloid protein; angiopoietin; apoptosis related protein; cadherin;
KW   cyclin; polymerase; oncogene; histone; kinase; colony stimulating factor;
KW   complement related protein; cytochrome; kinesin; cytokine; interferon;
KW   interleukin; G-protein coupled receptor; thioesterase; inflammation;
KW   multifactorial disease; autoimmune disease; infection;
KW   nervous system disease; ss.
XX
OS   Homo sapiens.
XX
PN   WO200147944-A2.
XX
PD   05-JUL-2001.
XX
PF   28-DEC-2000; 2000WO-US35498.
XX
PR   28-DEC-1999;   99US-0173419.
PR   27-DEC-2000; 2000US-0173419.
XX
PA   (CURA-) CURAGEN CORP.
XX
PI   Shimkets RA,  Leach M;
XX
DR   WPI; 2001-465210/50.
XX
PT   Polymorphic nucleic acids encoding e.g. amylases, cyclins, polymerases,
PT   oncogenes and histones, useful for diagnosing and treating, e.g.
PT   cancer, autoimmune diseases and infections -
XX
PS   Claim 1; Page 3170; 4143pp; English.
XX
CC   The present invention relates to oligonucleotides encoding polymorphic
CC   variants of proteins related to amylases, amyloid proteins, angiopoietin,
CC   apoptosis related proteins, cadherin, cyclin, polymerase, oncogenes,
CC   histones, kinases, colony stimulating factors, complement related
CC   proteins, cytochromes, kinesins, cytokines, interferons, interleukins,
CC   G-protein coupled receptors and thioesterases. The present sequence is
CC   one such oligonucleotide. The oligonucleotides and the peptides encoded
CC   by them may be used in the prevention, diagnosis and treatment of
CC   diseases associated with inappropriate expression of the proteins listed
CC   above. Disorders that may be prevented, diagnosed and/or treated include
CC   multifactorial diseases with a genetic component, such as autoimmune
CC   diseases (e.g. rheumatoid arthritis, multiple sclerosis, diabetes,
CC   systemic lupus erythromatosus and Grave's disease), inflammation, cancer
CC   (e.g. cancers of the bladder, brain, breast, colon and kidney,
CC   leukaemia), diseases of the nervous system and an infection of pathogenic
CC   organisms.
XX
SQ   Sequence 51 BP; 7 A; 14 C; 19 G; 11 T; 0 other;

  Query Match             0.9%;  Score 19;  DB 22;  Length 51;
  Best Local Similarity   100.0%;  Pred. No. 61;
  Matches   19;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy   1232 actacatccaccgagacct 1250
           ||||||||||||||||||||
Db     25 ACTACATCCACCGAGACCT 7


RESULT  23
AAL33025/c
ID   AAL33025 standard; DNA; 51 BP.
XX
AC   AAL33025;
XX
DT   24-JAN-2002  (first entry)
XX
DE   Human SNP oligonucleotide #6233.
XX
KW   Immunosuppressive; immunostimulatory; antiinflammatory; cytostatic;
KW   neuroprotective; antimicrobial; gene therapy; vaccine; amylase; cancer;
KW   amyloid protein; angiopoietin; apoptosis related protein; cadherin;
KW   cyclin; polymerase; oncogene; histone; kinase; colony stimulating factor;
KW   complement related protein; cytochrome; kinesin; cytokine; interferon;
KW   interleukin; G-protein coupled receptor; thioesterase; inflammation;
KW   multifactorial disease; autoimmune disease; infection;
KW   nervous system disease; ss.
XX
OS   Homo sapiens.
XX
PN   WO200147944-A2.
XX
PD   05-JUL-2001.
```

XX
PF 28-DEC-2000; 2000WO-US35498.
XX
PR 28-DEC-1999; 99US-0173419.
PR 27-DEC-2000; 2000US-0173419.
XX
PA (CURA-) CURAGEN CORP.
XX
PI Shimkets RA, Leach M;
XX
DR WPI; 2001-465210/50.
XX
PT Polymorphic nucleic acids encoding e.g. amylases, cyclins, polymerases,
PT oncogenes and histones, useful for diagnosing and treating, e.g.
PT cancer, autoimmune diseases and infections -
XX
PS Claim 1; Page 3170; 4143pp; English.
XX
CC The present invention relates to oligonucleotides encoding polymorphic
CC variants of proteins related to amylases, amyloid proteins, angiopoietin,
CC apoptosis related proteins, cadherin, cyclin, polymerase, oncogenes,
CC histones, kinases, colony stimulating factors, complement related
CC proteins, cytochromes, kinesins, cytokines, interferons, interleukins,
CC G-protein coupled receptors and thioesterases. The present sequence is
CC one such oligonucleotide. The oligonucleotides and the peptides encoded
CC by them may be used in the prevention, diagnosis and treatment of
CC diseases associated with inappropriate expression of the proteins listed
CC above. Disorders that may be prevented, diagnosed and/or treated include
CC multifactorial diseases with a genetic component, such as autoimmune
CC diseases (e.g. rheumatoid arthritis, multiple sclerosis, diabetes,
CC systemic lupus erythromatosus and Grave's disease), inflammation, cancer
CC (e.g. cancers of the bladder, brain, breast, colon and kidney,
CC leukaemia), diseases of the nervous system and an infection of pathogenic
CC organisms.
XX
SQ Sequence 51 BP; 7 A; 12 C; 20 G; 12 T; 0 other;

Query Match 0.9%; Score 19; DB 22; Length 51;
Best Local Similarity 100.0%; Pred. No. 61;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1232 actacatccaccgagacct 1250
||||||||||||||||||||
Db 24 ACTACATCCACCGAGACCT 6

RESULT 24
AAA82879
ID AAA82879 standard; DNA; 19 BP.
XX
AC AAA82879;
XX
DT 04-DEC-2000 (first entry)
XX
DE cdk4 ribozyme binding site #60.
XX
KW Ribozyme; hairpin; hammerhead; gene therapy; vasotropic;
KW restenosis; ss.
XX
OS Mammalia.
XX
PN WO200032765-A2.
XX
PD 08-JUN-2000.
XX
PF 06-DEC-1999; 99WO-US28772.
XX
PR 04-DEC-1998; 98US-0110954.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Tritz R, Welch PJ, Barber JR, Robbins JM;
XX
DR WPI; 2000-412314/35.
XX
PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT PCNA and Cyclin B1 -
XX
PS Disclosure; Page 53; 109pp; English.
XX
CC The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells.
CC The ribozyme is resistant to endonuclease activity and hence is
CC efficient in restenosis treatment.
XX
SQ Sequence 19 BP; 1 A; 6 C; 7 G; 5 T; 0 other;

Query Match 0.9%; Score 18; DB 21; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1297 gctgactttggcctggcc 1314
||||||||||||||||||
Db 2 gctgactttggcctggcc 19

RESULT 25
AAH58041
ID AAH58041 standard; DNA; 19 BP.
XX
AC AAH58041;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cell-cycle dependent kinase cdk4 ribozyme binding site SEQ ID NO:465.
XX
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnerary;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200130362-A2.
XX
PD 03-MAY-2001.
XX
PF 26-OCT-2000; 2000WO-US29500.
XX
PR 26-OCT-1999; 99US-0161532.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Robbins JM, Tritz R;
XX
DR WPI; 2001-300427/31.
XX
PT Treating proliferative skin or eye diseases and scarring, using
PT ribozymes that cleave RNA encoding cytokines involved in inflammation,
PT matrix metalloproteinases, growth factors and cell-cycle dependent
PT kinases -
XX

PS Example 1; Page 105; 408pp; English.
XX
CC The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC nucleic acid segment encoding (I). (I) can have antipsoriatic,
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
CC ophthalmological, vulnerary, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative
CC skin diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention.
XX
SQ Sequence 19 BP; 1 A; 6 C; 7 G; 5 T; 0 other;

Query Match 0.9%; Score 18; DB 22; Length 19;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1297 gctgactttggcctggcc 1314
||||||||||||||||||
Db 2 gctgactttggcctggcc 19

RESULT 26
AAX29342
ID AAX29342 standard; DNA; 20 BP.
XX
AC AAX29342;
XX
DT 10-JUN-1999 (first entry)
XX
DE Chemically modified sense control probe ISIS No: 14318.
XX
KW Antisense oligonucleotide; Jun N-terminal kinase; JNK; hybridise; JNK1;
KW JNK2; JNK3; cell cycle progression; phosphorylation; tumour; probe;
KW hyperproliferative disease; human; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9909214-A1.
XX
PD 25-FEB-1999.
XX
PF 07-AUG-1998; 98WO-US16488.
XX
PR 13-AUG-1997; 97US-0910629.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Dean N, Gaarde WA, Mckay R, Monia BP, Nero PS;
XX
DR WPI; 1999-181060/15.
XX
PT New antisense oligonucleotides that detect and modulate the
PT expression of Jun N-terminal kinase proteins - useful for treating
PT hyperproliferative diseases and inhibiting tumor growth in animals,
PT and for modulating protein phosphorylation by these proteins
XX
PS Example 4; Page 92; 190pp; English.
XX
CC The invention relates to antisense oligonucleotides that detect and
CC modulate the expression of Jun N-terminal kinase (JNK) proteins. The
CC oligonucleotides specifically hybridize to a nucleic acid encoding a
CC JNK1, JNK2 or JNK3 protein, and which modulate expression of these
CC proteins. The oligonucleotides are useful for modulating JNK protein
CC expression and cell cycle progression in cultured cells or animal cells.
CC The oligonucleotides are also useful for modulating the phosphorylation
CC of a protein that has been phosphorylated by a JNK protein, and the
CC expression of a cellular protein that promotes one or more metastatic
CC events. The oligonucleotides also form pharmaceutical compositions for
CC treating animals with a hyperproliferative disease, and for inhibiting
CC tumor growth in an animal.
XX
SQ Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 other;

Query Match 0.9%; Score 18; DB 20; Length 20;
Best Local Similarity 100.0%; Pred. No. 1.9e+02;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1300 gactttggcctggcccgg 1317
||||||||||||||||||
Db 1 gactttggcctggcccgg 18

RESULT 27
AAX29331/c
ID AAX29331 standard; DNA; 20 BP.
XX
AC AAX29331;
XX
DT 10-JUN-1999 (first entry)
XX
DE JNK2-specific probe ISIS No: 12560.
XX
KW Antisense oligonucleotide; Jun N-terminal kinase; JNK; hybridise; JNK1;
KW JNK2; JNK3; cell cycle progression; phosphorylation; tumour; probe;
KW hyperproliferative disease; human; ss.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN WO9909214-A1.
XX
PD 25-FEB-1999.
XX
PF 07-AUG-1998; 98WO-US16488.
XX
PR 13-AUG-1997; 97US-0910629.
XX
PA (ISIS-) ISIS PHARM INC.
XX
PI Dean N, Gaarde WA, Mckay R, Monia BP, Nero PS;
XX
DR WPI; 1999-181060/15.
XX
PT New antisense oligonucleotides that detect and modulate the
PT expression of Jun N-terminal kinase proteins - useful for treating
PT hyperproliferative diseases and inhibiting tumor growth in animals,
PT and for modulating protein phosphorylation by these proteins
XX
PS Example 4; Page 87; 190pp; English.
XX
CC The invention relates to antisense oligonucleotides that detect and
CC modulate the expression of Jun N-terminal kinase (JNK) proteins. The
CC oligonucleotides specifically hybridize to a nucleic acid encoding a
CC JNK1, JNK2 or JNK3 protein, and which modulate expression of these
CC proteins. The oligonucleotides are useful for modulating JNK protein
CC expression and cell cycle progression in cultured cells or animal cells.
CC The oligonucleotides are also useful for modulating the phosphorylation
CC of a protein that has been phosphorylated by a JNK protein, and the
CC expression of a cellular protein that promotes one or more metastatic
CC events. The oligonucleotides also form pharmaceutical compositions for
CC treating animals with a hyperproliferative disease, and for inhibiting

```
CC   tumor growth in an animal.
XX
SQ   Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 other;


  Query Match             0.9%;  Score 18;  DB 20;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.9e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy   1300 gactttggcctggcccgg 1317
           ||||||||||||||||||
Db     20 GACTTTGGCCTGGCCCGG 3


RESULT  28
AAC62874/c
ID   AAC62874 standard; DNA; 20 BP.
XX
AC   AAC62874;
XX
DT   06-FEB-2001  (first entry)
XX
DE   JNK antisense oligonucleotide ISIS #12560.
XX
KW   Antisense; gene therapy; JNK2 protein; apoptosis; cancer;
KW   cellular hyperproliferation; Alzheimer's; Parkinson's disease;
KW   amylotrophic lateral sclerosis; retinitis; pigmentosa; epilepsy;
KW   myocardial infarction; stroke; obstructive jaundice; polycystic kidney;
KW   diabetes; Jun N-terminal kinase; ss.
XX
OS   Homo sapiens.
XX
PN   WO200059549-A1.
XX
PD   12-OCT-2000.
XX
PF   04-APR-2000; 2000WO-US08880.
XX
PR   07-APR-1999;   99US-0287796.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Mckay R,  Dean NM,  Monia BP,  Nero PS,  Gaarde WA;
XX
DR   WPI; 2000-638427/61.
XX
PT   Novel methods for reducing apoptosis comprising contacting cells with
PT   antisense oligonucleotides, useful for treating apoptotic disorders,
PT   e.g. cancer -
XX
PS   Claim 3; Page 133; 160pp; English.
XX
CC   The present invention relates to antisense oligonucleotides
CC   (AAC62844-C63000, AAA96093-A96099 and AAA07993) that hybridise
CC   specifically to a nucleotide encoding a Jun N-terminal kinase (JNK2)
CC   protein, resulting in decrease of JNK2 expression and leading to
CC   induction of apoptosis. The present sequence is one such antisense
CC   oligonucleotide. The oligonucleotides of the present invention are useful
CC   for treating diseases or conditions with reduced apoptosis, e.g. cancer
CC   and cellular hyperproliferation. The oligonucleotides may also be used to
CC   increase the stimulation of apoptotic proteins, e.g. for treating
CC   Alzheimer's or Parkinson's disease, amylotrophic lateral sclerosis,
CC   retinitis, pigmentosa, epilepsy, myocardial infarction, stroke,
CC   obstructive jaundice, polycystic kidney and diabetes. The present
CC   sequence may have a phosphorothioate backbone.
XX
SQ   Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 other;


  Query Match             0.9%;  Score 18;  DB 21;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.9e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy   1300 gactttggcctggcccgg 1317
           ||||||||||||||||||
Db     20 GACTTTGGCCTGGCCCGG 3


RESULT  29
AAC62885
ID   AAC62885 standard; DNA; 20 BP.
XX
AC   AAC62885;
XX
DT   06-FEB-2001  (first entry)
XX
DE   JNK antisense oligonucleotide ISIS #14318.
XX
KW   Antisense; gene therapy; JNK2 protein; apoptosis; cancer;
KW   cellular hyperproliferation; Alzheimer's; Parkinson's disease;
KW   amylotrophic lateral sclerosis; retinitis; pigmentosa; epilepsy;
KW   myocardial infarction; stroke; obstructive jaundice; polycystic kidney;
KW   diabetes; Jun N-terminal kinase; ss.
XX
OS   Homo sapiens.
XX
PN   WO200059549-A1.
XX
PD   12-OCT-2000.
XX
PF   04-APR-2000; 2000WO-US08880.
XX
PR   07-APR-1999;   99US-0287796.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Mckay R,  Dean NM,  Monia BP,  Nero PS,  Gaarde WA;
XX
DR   WPI; 2000-638427/61.
XX
PT   Novel methods for reducing apoptosis comprising contacting cells with
PT   antisense oligonucleotides, useful for treating apoptotic disorders,
PT   e.g. cancer -
XX
PS   Example 4; Page 135; 160pp; English.
XX
CC   The present invention relates to antisense oligonucleotides
CC   (AAC62844-C63000, AAA96093-A96099 and AAA07993) that hybridise
CC   specifically to a nucleotide encoding a Jun N-terminal kinase (JNK2)
CC   protein, resulting in decrease of JNK2 expression and leading to
CC   induction of apoptosis. The present sequence is one such antisense
CC   oligonucleotide. The oligonucleotides of the present invention are useful
CC   for treating diseases or conditions with reduced apoptosis, e.g. cancer
CC   and cellular hyperproliferation. The oligonucleotides may also be used to
CC   increase the stimulation of apoptotic proteins, e.g. for treating
CC   Alzheimer's or Parkinson's disease, amylotrophic lateral sclerosis,
CC   retinitis, pigmentosa, epilepsy, myocardial infarction, stroke,
CC   obstructive jaundice, polycystic kidney and diabetes. The present
CC   sequence may have a phosphorothioate backbone.
XX
SQ   Sequence 20 BP; 2 A; 7 C; 7 G; 4 T; 0 other;


  Query Match             0.9%;  Score 18;  DB 21;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 1.9e+02;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy   1300 gactttggcctggcccgg 1317
           ||||||||||||||||||
Db      1 gactttggcctggcccgg 18


RESULT  30
AAA48651/c
ID   AAA48651 standard; DNA; 20 BP.
XX
```

```
AC   AAA48651;
XX
DT   20-SEP-2000  (first entry)
XX
DE   Antisense oligonucleotide ISIS no.15354 to human JNK2 gene.
XX
KW   Antisense; E-selectin; TNF alpha; cell adhesion;
KW   tumour necrosis factor alpha; phosphorothioate; methoxyethoxy;
KW   sepsis; rheumatoid arthritis; inflammatory; immune disease;
KW   inflammatory bowel disease; allergic contact dermatitis; psoriasis;
KW   diabetes; Grave's disease; allograft rejection; cancer; antibacterial;
KW   immunosuppressive; antipsoriatic; antidiabetic; antithyroid;
KW   cytostatic; dermatological; antiallergic; Ha-ras; c-raf;
KW   c-Jun N-terminal kinase; JNK; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1..6
FT                    /*tag= a
FT                    /mod_base= OTHER
FT                    /note= "All bases are 2'-methoxyethoxy,
FT                    additionally C bases are m5c"
FT   modified_base    7..15
FT                    /*tag= b
FT                    /mod_base= OTHER
FT                    /note= "Phosphorothioate internucleotide linkage"
FT   modified_base    16..20
FT                    /*tag= c
FT                    /mod_base= OTHER
FT                    /note= "All bases are 2'-methoxyethoxy,
FT                    additionally C bases are m5c"
XX
PN   WO200034303-A1.
XX
PD   15-JUN-2000.
XX
PF   08-DEC-1999;   99WO-US28965.
XX
PR   10-DEC-1998;   98US-0209668.
XX
PA   (ISIS-) ISIS PHARM INC.
XX
PI   Monia BP,  Xu XS;
XX
DR   WPI; 2000-423367/36.
XX
PT   Modulating cell adhesion molecule expression for treating immune or
PT   inflammatory diseases involves treating cell with specific inhibitor of
PT   Tumour Necrosis Factor alpha signalling molecule  -
XX
PS   Claim 36; Page 46; 100pp; English.
XX
CC   A novel method for modulating cell adhesion molecule expression
CC   involves antisense inhibition of a tumour necrosis factor (TNF) alpha
CC   signalling molecule. In the method TNF alpha signalling molecules
CC   Ha-ras, c-raf and c-Jun N-terminal kinase (JNK)2 were inhibited by
CC   antisense oligonucleotides. In addition an antisense oligonucleotide
CC   to the cell adhesion molecule E-selectin was also examined. The
CC   present sequence is the JNK2 antisense oligonucleotide. The
CC   antisense oligonucleotides used in the method contained modifications,
CC   namely phosphorothioate linkages and 2'methoxyethoxy bases. Some C
CC   residues also had a 5'methyl modification. Inhibitors of the TNF alpha
CC   signalling molecules have antibacterial, immunosuppressive,
CC   antipsoriatic, antidiabetic, antithyroid, cytostatic, dermatological,
CC   antiallergic and antiinflammatory activity. The antisense inhibitors
CC   may be useful for the treatment of sepsis, rheumatoid arthritis,
CC   inflammatory, immune disease, inflammatory bowel disease, allergic
CC   contact dermatitis, psoriasis, diabetes, Grave's disease, allograft
CC   rejection and cancer.
XX
SQ   Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 other;
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RESULT  31
AAH23754/c
ID   AAH23754 standard; DNA; 20 BP.
XX
AC   AAH23754;
XX
DT   13-AUG-2001  (first entry)
XX
DE   JNK1 antisense oligonucleotide, JNK2AS, (ISIS #12560).
XX
KW   JNK; jun kinase; antisense; cytostatic; cancer;
KW   2'-O-methoxyethyl oligonucleotide; MOE; phosphorothioate; ss.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   modified_base    1..20
FT                    /*tag= a
FT                    /mod_base= "OTHER"
FT                    /note= "This oligonucleotide is a 2'-O-methoxyethyl (MOE)
FT                    chimeric antisense oligonucleotide containing five
FT                    MOE/phoshopdiester residues flanking a
FT                    2'-deoxynucleotide/phosphorothioate region"
XX
PN   WO200134792-A2.
XX
PD   17-MAY-2001.
XX
PF   10-NOV-2000; 2000WO-US30869.
XX
PR   12-NOV-1999;   99US-0165224.
XX
PA   (USSH ) US DEPT HEALTH & HUMAN SERVICES.
XX
PI   Potapova O,  Gorospe M,  Holbrook NJ;
XX
DR   WPI; 2001-335925/35.
XX
PT   Use of Jun Kinase antisense mRNA for treating cancer by administering
PT   vector comprising promoter operably linked to DNA sequence that encodes
PT   the antisense mRNA to patient diagnosed with cancer  -
XX
PS   Claim 1; Page 41; 75pp; English.
XX
CC   The present invention relates to the use of Jun Kinase (JNK) antisense
CC   oligonucleotides for treating cancer and for screening compounds that
CC   mimic or augment the effect of JNK antisense oligonucleotides treatment
CC   for cancer. The present sequence is one such JNK antisense
CC   oligonucleotide.
XX
SQ   Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 other;
```

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  Query Match             0.9%;  Score 18;  DB 22;  Length 20;
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          ||||||||||||||||||
Db     20 GACTTTGGCCTGGCCCGG 3


RESULT  32
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AAF99183/c
ID   AAF99183 standard; DNA; 20 BP.
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AC   AAF99183;
XX
DT   12-JUN-2001  (first entry)
XX
DE   Immunostimulatory nucleic acid #299.
XX
KW   Vaccine; cytostatic; virucidal; bactericidal; fungicidal; anti-parasitic;
KW   immunostimulatory; tumour; viral infection; bacterial infection;
KW   fungal infection; parasitic infection; cancer; asthma;
KW   infectious disease; allergy; immune deficiency; phosphorothioate; ss.
XX
OS   Synthetic.
XX
PN   WO200122972-A2.
XX
PD   05-APR-2001.
XX
PF   25-SEP-2000; 2000WO-US26383.
XX
PR   25-SEP-1999;   99US-0156113.
PR   27-SEP-1999;   99US-0156135.
PR   23-AUG-2000; 2000US-0227436.
XX
PA   (IOWA ) UNIV IOWA RES FOUND.
PA   (COLE-) COLEY PHARM GMBH.
XX
PI   Krieg AM,  Schetter C,  Vollmer J;
XX
DR   WPI; 2001-273485/28.
XX
PT   Vaccinating against tumors, infectious diseases, allergies and asthma
PT   using immunostimulatory Py-rich and TG nucleic acids -
XX
PS   Claim 101; Page 44; 338pp; English.
XX
CC   The present invention relates to a method for stimulating an immune
CC   response. The method comprises administering an immunostimulatory nucleic
CC   acid to a non-rodent subject in sufficient quantity to stimulate an
CC   immune response. The present sequence is one such immunostimulatory
CC   nucleic acid. The immunostimulatory nucleic acids can be pyrimidine rich
CC   (py-rich) or thymidine (T) rich. The method is used to vaccinate subjects
CC   against tumour antigens, viral antigens (e.g. herpesviridae, retroviridae
CC   and/or orthomyxoviridae), bacterial antigens (e.g. toxoplasma,
CC   haemophilus, campylobacter, clostridium, Escherichia coli and/or
CC   staphylococcus), fungal antigens and/or parasitic antigens. The method is
CC   also useful for preventing cancer, asthma, infectious disease, allergy or
CC   immune deficiency. The present sequence can also be used to redirect a
CC   Th2 to a Th1 immune response and to activate immune cells.
CC   Note: the present sequence may have a phosphorothioate backbone.
XX
SQ   Sequence 20 BP; 4 A; 7 C; 7 G; 2 T; 0 other;


  Query Match             0.9%;  Score 18;  DB 22;  Length 20;
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           ||||||||||||||||||
Db     20 GACTTTGGCCTGGCCCGG 3


RESULT  33
AAH41497
ID   AAH41497 standard; DNA; 34 BP.
XX
AC   AAH41497;
XX
DT   23-AUG-2001  (first entry)
XX
DE   Human tyrosine kinase Hck PCR primer SEQ ID NO:9.
XX
KW   Human; tyrosine kinase Hck binding protein; tyrosine kinase; Hck;
KW   tumour lethal factor; tumour necrosis factor alpha; apoptosis; HSB-1;
KW   Hck signal transduction; human immunodeficiency virus; HIV infection;
KW   anticancer; PCR primer; ss.
XX
OS   Homo sapiens.
XX
PN   WO200132869-A1.
XX
PD   10-MAY-2001.
XX
PF   26-OCT-2000; 2000WO-JP07500.
XX
PR   29-OCT-1999;   99JP-0309957.
XX
PA   (SSSE ) SSP CO LTD.
XX
PI   Taniyama T,  Narita T;
XX
DR   WPI; 2001-316440/33.
XX
PT   New proteins which bind to human tyrosine kinase Hck for promotion of
PT   apoptosis and for the elucidation of the mechanism of Hck signal
PT   transduction -
XX
PS   Example 3; Page 33; 45pp; Japanese.
XX
CC   The present invention describes a protein, designated HSB-1, which binds
CC   to human tyrosine kinase Hck. Also described are: (1) nucleic acids
CC   encoding the protein and its derivatives; (2) recombinant vectors
CC   containing the nucleic acids; and (3) host cells transformed by the
CC   vectors and expressing the protein. HSB-1 has cytostatic activity, binds
CC   tyrosine kinase, enhances tumour necrosis factor alpha and promotes
CC   apoptosis. HSB-1 proteins are used for the elucidation of the mechanism
CC   of Hck signal transduction and of the role of Hck in human
CC   immunodeficiency virus (HIV) infection. They can be used for the
CC   treatment of infections and other diseases with which Hck is associated.
CC   They promote the anticancer activity of tumour necrosis factor alpha.
CC   The present sequence represents a PCR primer for the human tyrosine
CC   kinase Hck, which is used in an example from the present invention.
XX
SQ   Sequence 34 BP; 8 A; 8 C; 9 G; 9 T; 0 other;


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Db    17 atgaagtccaagttcctc 34


RESULT  34
AAA82878
ID   AAA82878 standard; DNA; 19 BP.
XX
AC   AAA82878;
XX
DT   04-DEC-2000  (first entry)
XX
DE   cdk4 ribozyme binding site #59.
XX
KW   Ribozyme; hairpin; hammerhead; gene therapy; vasotropic;
KW   restenosis; ss.
XX
OS   Mammalia.
XX
PN   WO200032765-A2.
XX
PD   08-JUN-2000.
```

XX
PF 06-DEC-1999; 99WO-US28772.
XX
PR 04-DEC-1998; 98US-0110954.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Tritz R, Welch PJ, Barber JR, Robbins JM;
XX
DR WPI; 2000-412314/35.
XX
PT New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
PT RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1,
PT PCNA and Cyclin B1 -
XX
PS Disclosure; Page 53; 109pp; English.
XX
CC The present invention relates to a hairpin or hammerhead ribozyme,
CC designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase
CC other than cell-cycle dependent kinases CDK1, PCNA and Cyclin B1.
CC Representative examples of ribozyme recognition sites are given in
CC AAA82415 to AAA86787. The ribozyme of the invention is useful for
CC inhibiting restenosis by introduction of the ribozyme into cells.
CC The ribozyme is resistant to endonuclease activity and hence is
CC efficient in restenosis treatment.
XX
SQ Sequence 19 BP; 1 A; 5 C; 7 G; 6 T; 0 other;

Query Match 0.8%; Score 17; DB 21; Length 19;
Best Local Similarity 100.0%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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||||||||||||||||
Db 3 gctgactttggcctggc 19

RESULT 35
AAH58040
ID AAH58040 standard; DNA; 19 BP.
XX
AC AAH58040;
XX
DT 10-SEP-2001 (first entry)
XX
DE Cell-cycle dependent kinase cdk4 ribozyme binding site SEQ ID NO:464.
XX
KW Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme;
KW recognition site; target; ribozyme binding site; eye disease; vulnerary;
KW proliferative disease; skin disease; psoriasis; diabetic retinopathy;
KW cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP;
KW matrix metalloproteinase; growth factor; reductase; scarring; cytostatic;
KW antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide;
KW antisickling; ophthalmological; keratolytic; gene therapy; viral wart;
KW atopic dermatitis; actinic keratosis; squamous cell carcinoma;
KW basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar;
KW sickle cell retinopathy; ss.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN WO200130362-A2.
XX
PD 03-MAY-2001.
XX
PF 26-OCT-2000; 2000WO-US29500.
XX
PR 26-OCT-1999; 99US-0161532.
XX
PA (IMMU-) IMMUSOL INC.
XX
PI Robbins JM, Tritz R;

XX
DR WPI; 2001-300427/31.
XX
PT Treating proliferative skin or eye diseases and scarring, us
PT ribozymes that cleave RNA encoding cytokines involved in infl
PT matrix metalloproteinases, growth factors and cell-cycle depe
PT kinases -
XX
PS Example 1; Page 105; 408pp; English.
XX
CC The present invention describes a method for treating a proliferative
CC skin or eye disease and scarring. The method involves administering a
CC ribozyme (I) which cleaves RNA encoding a cytokine involved in
CC inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle
CC dependent kinase, growth factor or a reductase, or administering a
CC nucleic acid molecule (II) comprising a promoter operably linked to a
CC nucleic acid segment encoding (I). (I) can have antipsoriatic,
CC dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling,
CC ophthalmological, vulnerary, keratolytic and virucide activities, and
CC cleaves RNA encoding cytokine involved in inflammation. (I) can be used
CC in gene therapy. (I) and (II) are useful for treating proliferative
CC skin diseases such as psoriasis, atopic dermatitis, actinic keratosis,
CC squamous or basal cell carcinoma and viral or seborrheic wart. They can
CC also be used for treating proliferative eye diseases such as diabetic
CC retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of
CC prematurity and retinal detachment, and for treating and preventing
CC scarring such as keloid, adhesion and hypertrophic or hypertrophic burn
CC scar. AAH57577 to AAH62099 represent sequences used in the
CC exemplification of the present invention.
XX
SQ Sequence 19 BP; 1 A; 5 C; 7 G; 6 T; 0 other;

Query Match 0.8%; Score 17; DB 22; Length 19;
Best Local Similarity 100.0%; Pred. No. 5.8e+02;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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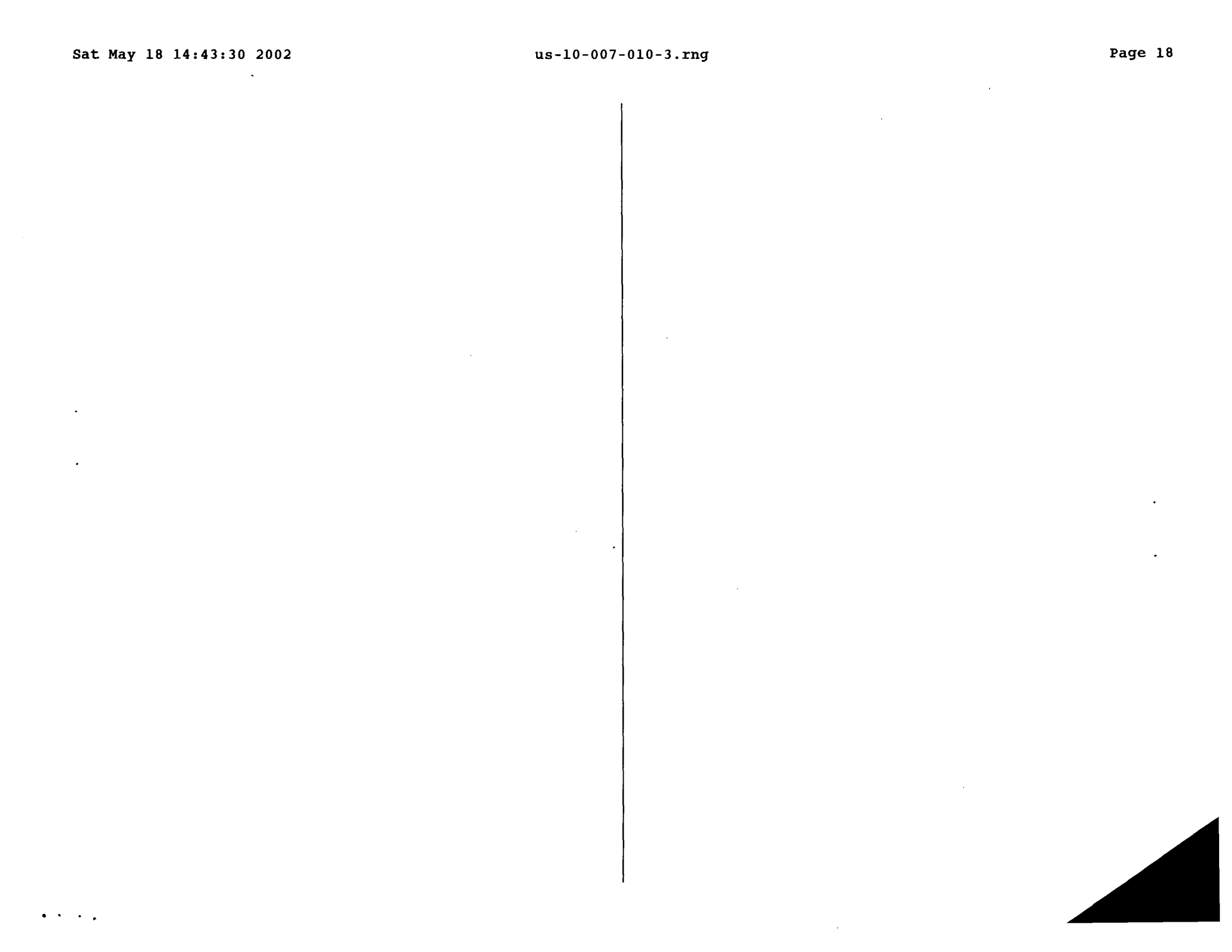

GenCore version 4.5

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Gapop 60.0 , Gapext 60.0

Searched: 383533 seqs, 122816752 residues

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Minimum DB seq length: 0
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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c	1	18	0.9	20	2	US-08-910-629A-31	Sequence 31, Appl
	2	18	0.9	20	2	US-08-910-629A-42	Sequence 42, Appl
c	3	18	0.9	20	3	US-09-209-668-7	Sequence 7, Appli
c	4	18	0.9	20	3	US-09-287-796-31	Sequence 31, Appl
	5	18	0.9	20	3	US-09-287-796-42	Sequence 42, Appl
c	6	18	0.9	20	4	US-09-130-616-31	Sequence 31, Appl
	7	18	0.9	20	4	US-09-130-616-42	Sequence 42, Appl
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c	11	17	0.8	23	5	PCT-US95-04228-2	Sequence 2, Appli
	12	16	0.8	24	2	US-08-859-998-598	Sequence 598, App
	13	16	0.8	24	4	US-09-225-928-598	Sequence 598, App
c	14	15	0.7	18	3	US-08-951-923-51	Sequence 51, Appl
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	17	15	0.7	31	2	US-08-942-423-51	Sequence 51, Appl
	18	15	0.7	36	3	US-08-951-923-52	Sequence 52, Appl
c	19	15	0.7	36	3	US-08-724-586-3	Sequence 3, Appli
c	20	15	0.7	36	4	US-09-421-632-3	Sequence 3, Appli
c	21	15	0.7	45	2	US-08-039-198B-3	Sequence 3, Appli
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	23	15	0.7	104	3	US-09-058-389A-19	Sequence 19, Appl
c	24	15	0.7	105	4	US-09-461-697-78	Sequence 78, Appl
	25	14	0.7	17	4	US-08-584-040-7661	Sequence 7661, Ap
c	26	14	0.7	18	1	US-08-105-483-197	Sequence 197, App
c	27	14	0.7	18	1	US-08-220-151-78	Sequence 78, Appl
c	28	14	0.7	18	1	US-08-413-118-78	Sequence 78, Appl
c	29	14	0.7	18	1	US-08-224-657-54	Sequence 54, Appl
c	30	14	0.7	18	1	US-08-709-209-197	Sequence 197, App
c	31	14	0.7	18	1	US-08-458-101-197	Sequence 197, App
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c	46	14	0.7	22	1	US-08-379-078-549	Sequence 549, App
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c	48	14	0.7	22	5	PCT-US93-00977-172	Sequence 172, App
	49	14	0.7	24	1	US-07-842-349-17	Sequence 17, Appl
	50	14	0.7	24	1	US-08-151-574-39	Sequence 39, Appl
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	52	14	0.7	24	2	US-08-480-994-15	Sequence 15, Appl
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	54	14	0.7	24	2	US-08-419-448-39	Sequence 39, Appl
	55	14	0.7	24	2	US-07-952-853-8	Sequence 8, Appli
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	58	14	0.7	24	2	US-08-485-573-15	Sequence 15, Appl
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	61	14	0.7	24	3	US-08-944-423A-15	Sequence 15, Appl
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	63	14	0.7	24	3	US-08-944-496-15	Sequence 15, Appl
	64	14	0.7	24	4	US-08-925-767-15	Sequence 15, Appl
	65	14	0.7	24	4	US-09-233-510-39	Sequence 39, Appl

ALIGNMENTS

```
RESULT 1
US-08-910-629A-31/c
; Sequence 31, Application US/08910629A
; Patent No. 5877309 .
; GENERAL INFORMATION:
;   APPLICANT: Robert A. McKay
;   APPLICANT: Nicholas M. Dean
;   APPLICANT: Brett Monia
;   TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDE
;   TITLE OF INVENTION: COMPOSITONS AND METHODS FOR THE MODULATION OF JNK
;   TITLE OF INVENTION: PROTEINS
;   NUMBER OF SEQUENCES: 86
;   CORRESPONDENCE ADDRESS:
;     ADDRESSEE: Law Offices of Jane Massey Licata
;     STREET: 66 East Main Street
;     CITY: Marlton
;     STATE: NJ
;     COUNTRY: USA
;     ZIP: 08053
;   COMPUTER READABLE FORM:
;     MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 MB
;     MEDIUM TYPE: STORAGE
;     COMPUTER: PENTIUM
;     OPERATING SYSTEM: WINDOWS 95
;     SOFTWARE: WORDPERFECT 6.1
;   CURRENT APPLICATION DATA:
;     APPLICATION NUMBER: US/08/910,629A
;     FILING DATE: August 13, 1997
;     CLASSIFICATION: 514
;   PRIOR APPLICATION DATA:
```

```
;      APPLICATION NUMBER:
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Jane Massey Licata
;      REGISTRATION NUMBER:  32,257
;      REFERENCE/DOCKET NUMBER:  ISPH-0215
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (609) 779-2400
;      TELEFAX:  (609) 779-8488
;  INFORMATION FOR SEQ ID NO:  31:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20
;      TYPE:  Nucleic Acid
;      STRANDEDNESS:  Single
;      TOPOLOGY:  Linear
;    ANTI-SENSE:  Yes
US-08-910-629A-31


  Query Match             0.9%;  Score 18;  DB 2;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 23;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy   1300 gactttggcctggcccgg 1317
          ||||||||||||||||||
Db     20 GACTTTGGCCTGGCCCGG 3


RESULT   2
US-08-910-629A-42
; Sequence 42, Application US/08910629A
; Patent No. 5877309
;  GENERAL INFORMATION:
;    APPLICANT:  Robert A. McKay
;    APPLICANT:  Nicholas M. Dean
;    APPLICANT:  Brett Monia
;    TITLE OF INVENTION:  ANTISENSE OLIGONUCLEOTIDE
;    TITLE OF INVENTION:  COMPOSITONS AND METHODS FOR THE MODULATION OF JNK
;    TITLE OF INVENTION:  PROTEINS
;    NUMBER OF SEQUENCES:  86
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Law Offices of Jane Massey Licata
;      STREET:  66 East Main Street
;      CITY:  Marlton
;      STATE:  NJ
;      COUNTRY:  USA
;      ZIP:  08053
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  DISKETTE, 3.5 INCH, 1.44 MB
;      MEDIUM TYPE:  STORAGE
;      COMPUTER:  PENTIUM
;      OPERATING SYSTEM:  WINDOWS 95
;      SOFTWARE:  WORDPERFECT 6.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/910,629A
;      FILING DATE:  August 13, 1997
;      CLASSIFICATION:  514
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Jane Massey Licata
;      REGISTRATION NUMBER:  32,257
;      REFERENCE/DOCKET NUMBER:  ISPH-0215
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (609) 779-2400
;      TELEFAX:  (609) 779-8488
;  INFORMATION FOR SEQ ID NO:  42:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20
;      TYPE:  Nucleic Acid
;      STRANDEDNESS:  Single
;      TOPOLOGY:  Linear
;    ANTI-SENSE:  No
US-08-910-629A-42


  Query Match             0.9%;  Score 18;  DB 2;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 23;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy   1300 gactttggcctggcccgg 1317
          ||||||||||||||||||
Db     1 GACTTTGGCCTGGCCCGG 18


RESULT   3
US-09-209-668-7/c
; Sequence 7, Application US/09209668A
; Patent No. 6114517
; GENERAL INFORMATION:
;  APPLICANT: Monia, Brett P.
;  APPLICANT: Xu, Xiaoxing S.
;  TITLE OF INVENTION: METHODS OF MODULATING TUMOR NECROSIS FACTOR
;  TITLE OF INVENTION: alpha-INDUCED EXPRESSION OF CELL ADHESION MOLECULES
;  FILE REFERENCE: ISPH-0336
;  CURRENT APPLICATION NUMBER: US/09/209,668A
;  CURRENT FILING DATE: 1998-12-10
;  NUMBER OF SEQ ID NOS: 25
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 7
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: antisense sequence
US-09-209-668-7


  Query Match             0.9%;  Score 18;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 23;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy   1300 gactttggcctggcccgg 1317
          ||||||||||||||||||
Db     20 GACTTTGGCCTGGCCCGG 3


RESULT   4
US-09-287-796-31/c
; Sequence 31, Application US/09287796A
; Patent No. 6133246
; GENERAL INFORMATION:
;  APPLICANT: McKay, Robert A.
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT: Monia, Brett
;  APPLICANT: Nero, Pam
;  APPLICANT: Gaarde, William A.
;  TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDE COMPOSITIONS AND METHODS
;  TITLE OF INVENTION: FOR THE MODULATION OF JNK PROTEINS
;  FILE REFERENCE: ISPH-0350
;  CURRENT APPLICATION NUMBER: US/09/287,796A
;  CURRENT FILING DATE: 1999-04-07
;  EARLIER APPLICATION NUMBER: 09/130,616
;  EARLIER FILING DATE: 1998-08-07
;  EARLIER APPLICATION NUMBER: 08/910,629
;  EARLIER FILING DATE: 1997-08-03
;  NUMBER OF SEQ ID NOS: 165
; SEQ ID NO 31
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Sequence
US-09-287-796-31
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Query Match 0.9%; Score 18; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 23;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy   1300 gactttggcctggcccgg 1317
          ||||||||||||||||||
Db     20 GACTTTGGCCTGGCCCGG 3
```

RESULT 5
US-09-287-796-42
; Sequence 42, Application US/09287796A
; Patent No. 6133246
; GENERAL INFORMATION:
; APPLICANT: McKay, Robert A.
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Monia, Brett
; APPLICANT: Nero, Pam
; APPLICANT: Gaarde, William A.
; TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDE COMPOSITIONS AND METHODS
; TITLE OF INVENTION: FOR THE MODULATION OF JNK PROTEINS
; FILE REFERENCE: ISPH-0350
; CURRENT APPLICATION NUMBER: US/09/287,796A
; CURRENT FILING DATE: 1999-04-07
; EARLIER APPLICATION NUMBER: 09/130,616
; EARLIER FILING DATE: 1998-08-07
; EARLIER APPLICATION NUMBER: 08/910,629
; EARLIER FILING DATE: 1997-08-03
; NUMBER OF SEQ ID NOS: 165
; SEQ ID NO 42
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-287-796-42

Query Match 0.9%; Score 18; DB 3; Length 20;
Best Local Similarity 100.0%; Pred. No. 23;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy   1300 gactttggcctggcccgg 1317
          ||||||||||||||||||
Db      1 gactttggcctggcccgg 18
```

RESULT 6
US-09-130-616-31/c
; Sequence 31, Application US/09130616C
; Patent No. 6221850
; GENERAL INFORMATION:
; APPLICANT: McKay, Robert A.
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Monia, Brett
; APPLICANT: Nero, Pam
; APPLICANT: Gaarde, William A.
; TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDE COMPOSITIONS AND METHODS
; TITLE OF INVENTION: FOR THE MODULATION OF JNK PROTEINS
; FILE REFERENCE: ISPH-0318
; CURRENT APPLICATION NUMBER: US/09/130,616C
; CURRENT FILING DATE: 1998-08-07
; EARLIER APPLICATION NUMBER: 08/910,629
; EARLIER FILING DATE: 1997-08-03
; NUMBER OF SEQ ID NOS: 178
; SEQ ID NO 31
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-130-616-31

Query Match 0.9%; Score 18; DB 4; Length 20;
Best Local Similarity 100.0%; Pred. No. 23;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy   1300 gactttggcctggcccgg 1317
          ||||||||||||||||||
Db     20 GACTTTGGCCTGGCCCGG 3
```

RESULT 7
US-09-130-616-42
; Sequence 42, Application US/09130616C
; Patent No. 6221850
; GENERAL INFORMATION:
; APPLICANT: McKay, Robert A.
; APPLICANT: Dean, Nicholas M.
; APPLICANT: Monia, Brett
; APPLICANT: Nero, Pam
; APPLICANT: Gaarde, William A.
; TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDE COMPOSITIONS AND METHODS
; TITLE OF INVENTION: FOR THE MODULATION OF JNK PROTEINS
; FILE REFERENCE: ISPH-0318
; CURRENT APPLICATION NUMBER: US/09/130,616C
; CURRENT FILING DATE: 1998-08-07
; EARLIER APPLICATION NUMBER: 08/910,629
; EARLIER FILING DATE: 1997-08-03
; NUMBER OF SEQ ID NOS: 178
; SEQ ID NO 42
; LENGTH: 20
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Sequence
US-09-130-616-42

Query Match 0.9%; Score 18; DB 4; Length 20;
Best Local Similarity 100.0%; Pred. No. 23;
Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
Qy   1300 gactttggcctggcccgg 1317
          ||||||||||||||||||
Db      1 gactttggcctggcccgg 18
```

RESULT 8
US-08-730-876-2/c
; Sequence 2, Application US/08730876
; Patent No. 5859314
; GENERAL INFORMATION:
; APPLICANT: HIBBS, Margaret L.;
; APPLICANT: DUNN, Ashley R.;
; APPLICANT: GRAILL, Dianne;
; APPLICANT: HODGSON George;
; APPLICANT: TARLINGTON, David M.;
; APPLICANT: ARMES, Jane
; TITLE OF INVENTION: ANIMALS WITH TARGETED GENE DELETION
; NUMBER OF SEQUENCES: 7
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Felfe & Lynch
; STREET: 805 Third Avenue
; CITY: New York City
; STATE: New York
; COUNTRY: USA
; ZIP: 10022
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.5 inch, 1.44mb
; COMPUTER: IBM PS/2
; OPERATING SYSTEM: PC-DOS
; SOFTWARE: Wordperfect
; CURRENT APPLICATION DATA:

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;      APPLICATION NUMBER:  US/08/730,876
;      FILING DATE:  18-Oct-1996
;      CLASSIFICATION:  800
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  60/005,578
;      FILING DATE:  20-Oct-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  No. 5859314man D. Hanson
;      REGISTRATION NUMBER:  30,946
;      REFERENCE/DOCKET NUMBER:  LUD 5369 - JEL/NDH/SLH
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 688-9200
;      TELEFAX:  (212) 838-3884
;  INFORMATION FOR SEQ ID NO:  2:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-730-876-2


  Query Match             0.8%;  Score 17;  DB 2;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 72;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    916 gggcagtttggggaagt 932
          |||||||||||||||||
Db     17 GGGCAGTTTGGGGAAGT 1


RESULT   9
US-09-490-692-71/c
; Sequence 71, Application US/09490692
; Patent No. 6180353
; GENERAL INFORMATION:
;  APPLICANT: Nicholas M. Dean
;  APPLICANT: Lex M. Cowsert
;  TITLE OF INVENTION: ANTISENSE MODULATION OF DAXX EXPRESSION
;  FILE REFERENCE: RTS-0120
;  CURRENT APPLICATION NUMBER: US/09/490,692
;  CURRENT FILING DATE: 2000-01-24
;  NUMBER OF SEQ ID NOS: 176
; SEQ ID NO 71
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Antisense Oligonucleotide
US-09-490-692-71


  Query Match             0.8%;  Score 17;  DB 4;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 72;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy     28 tcaggaggatgatgaag 44
          |||||||||||||||||
Db     18 TCAGGAGGATGATGAAG 2


RESULT  10
US-08-222-616-2/c
; Sequence 2, Application US/08222616
; Patent No. 5635177
;  GENERAL INFORMATION:
;    APPLICANT:  Bennett, Brian D.
;    APPLICANT:  Goeddel, David
;    APPLICANT:  Lee, James M.
;    APPLICANT:  Matthews, William
;    APPLICANT:  Tsai, Siao Ping
;    APPLICANT:  Wood, William I.
;    TITLE OF INVENTION:  PROTEIN TYROSINE KINASE AGONIST
;    TITLE OF INVENTION:  ANTIBODIES
;    NUMBER OF SEQUENCES:  42
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Genentech, Inc.
;      STREET:  460 Point San Bruno Blvd
;      CITY:  South San Francisco
;      STATE:  California
;      COUNTRY:  USA
;      ZIP:  94080
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  5.25 inch, 360 Kb floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  patin (Genentech)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/222,616
;      FILING DATE:  4-APR-1994
;      CLASSIFICATION:  530
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/US93/00586
;      FILING DATE:  22-JAN-1993
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  07/826935
;      FILING DATE:  22-JAN-1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Lee, Wendy M.
;      REGISTRATION NUMBER:
;      REFERENCE/DOCKET NUMBER:  821P2
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  415/225-1994
;      TELEFAX:  415/952-9881
;      TELEX:  910/371-7168
;  INFORMATION FOR SEQ ID NO:  2:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  23 bases
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-222-616-2


  Query Match             0.8%;  Score 17;  DB 1;  Length 23;
  Best Local Similarity   100.0%;  Pred. No. 72;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy   1420 gacgtctggtcctttgg 1436
          |||||||||||||||||
Db     23 GACGTCTGGTCCTTTGG 7


RESULT  11
PCT-US95-04228-2/c
; Sequence 2, Application PC/TUS9504228
;  GENERAL INFORMATION:
;    APPLICANT:  Genentech, Inc.
;    APPLICANT:  Bennett, Brian D.
;    APPLICANT:  Goeddel, David
;    APPLICANT:  Lee, James M.
;    APPLICANT:  Matthews, William
;    APPLICANT:  Tsai, Siao Ping
;    APPLICANT:  Wood, William I.
;    TITLE OF INVENTION:  PROTEIN TYROSINE KINASE AGONIST ANTIBODIES
;    NUMBER OF SEQUENCES:  45
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Genentech, Inc.
;      STREET:  460 Point San Bruno Blvd
;      CITY:  South San Francisco
;      STATE:  California
;      COUNTRY:  USA
;      ZIP:  94080
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  5.25 inch, 360 Kb floppy disk
;      COMPUTER:  IBM PC compatible
```

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;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  patin (Genentech)
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  PCT/US95/04228
;       FILING DATE:
;       CLASSIFICATION:
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  08/222616
;       FILING DATE:  04-APR-1994
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  Wendy M. Lee
;       REGISTRATION NUMBER:  00,000
;       REFERENCE/DOCKET NUMBER:  821P3PCT
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  415/225-1994
;       TELEFAX:  415/952-9881
;       TELEX:  910/371-7168
;   INFORMATION FOR SEQ ID NO:  2:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  23 bases
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
PCT-US95-04228-2


  Query Match             0.8%;  Score 17;  DB 5;  Length 23;
  Best Local Similarity   100.0%;  Pred. No. 72;
  Matches   17;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy   1420 gacgtctggtcctttgg 1436
          |||||||||||||||||
Db     23 GACGTCTGGTCCTTTGG 7


RESULT  12
US-08-859-998-598
; Sequence 598, Application US/08859998
; Patent No. 5994076
;  GENERAL INFORMATION:
;     APPLICANT:  Chenchik, Alex
;     APPLICANT:  Jokhadze, George
;     APPLICANT:  Bibilashvilli, Robert
;     TITLE OF INVENTION:  METHOD OF ASSAYING DIFFERENTIAL
;     TITLE OF INVENTION:  EXPRESSION
;     NUMBER OF SEQUENCES:  1375
;     CORRESPONDENCE ADDRESS:
;       ADDRESSEE:  Fish & Richardson, P.C.
;       STREET:  2200 Sand Hill Road, Suite 100
;       CITY:  Menlo Park
;       STATE:  CA
;       COUNTRY:  US
;       ZIP:  94025
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Diskette
;       COMPUTER:  IBM Compatible
;       OPERATING SYSTEM:  Windows95
;       SOFTWARE:  FastSEQ for Windows Version 2.0
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/08/859,998
;       FILING DATE:  21-MAY-1997
;       CLASSIFICATION:  435
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:
;       FILING DATE:
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  Field, Bret E.
;       REGISTRATION NUMBER:  37,620
;       REFERENCE/DOCKET NUMBER:  09096/002001
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  415-322-5070
;       TELEFAX:  415-854-0875
;   INFORMATION FOR SEQ ID NO:  598:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  24 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  DNA
;     FEATURE:
;       OTHER INFORMATION:  oligonucleotide primer
US-08-859-998-598


  Query Match             0.8%;  Score 16;  DB 2;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 2.3e+02;
  Matches   16;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy   1236 catccaccgagacctc 1251
          ||||||||||||||||
Db      8 CATCCACCGAGACCTC 23


RESULT  13
US-09-225-928-598
; Sequence 598, Application US/09225928
; Patent No. 6352829
;   GENERAL INFORMATION:
;       APPLICANT: Chenchik, Alex
;                  Jokhadze, George
;                  Bibilashvilli, Robert
;       TITLE OF INVENTION: METHOD OF ASSAYING DIFFERENTIAL
;                           EXPRESSION
;       NUMBER OF SEQUENCES: 1375
;       CORRESPONDENCE ADDRESS:
;            ADDRESSEE: Fish & Richardson, P.C.
;            STREET: 2200 Sand Hill Road, Suite 100
;            CITY: Menlo Park
;            STATE: CA
;            COUNTRY: US
;            ZIP: 94025
;       COMPUTER READABLE FORM:
;            MEDIUM TYPE: Diskette
;            COMPUTER: IBM Compatible
;            OPERATING SYSTEM: Windows95
;            SOFTWARE: FastSEQ for Windows Version 2.0
;       CURRENT APPLICATION DATA:
;            APPLICATION NUMBER: US/09/225,928
;            FILING DATE: 05-Jan-1999
;            CLASSIFICATION: <Unknown>
;       PRIOR APPLICATION DATA:
;            APPLICATION NUMBER: 08/859,998
;            FILING DATE: 21-MAY-1997
;       ATTORNEY/AGENT INFORMATION:
;            NAME: Field, Bret E.
;            REGISTRATION NUMBER: 37,620
;            REFERENCE/DOCKET NUMBER: 09096/002001
;       TELECOMMUNICATION INFORMATION:
;            TELEPHONE: 415-322-5070
;            TELEFAX: 415-854-0875
;   INFORMATION FOR SEQ ID NO: 598:
;       SEQUENCE CHARACTERISTICS:
;            LENGTH: 24 base pairs
;            TYPE: nucleic acid
;            STRANDEDNESS: single
;            TOPOLOGY: linear
;       MOLECULE TYPE: DNA
;       FEATURE:
;            OTHER INFORMATION:  oligonucleotide primer
;       SEQUENCE DESCRIPTION: SEQ ID NO: 598:
US-09-225-928-598


  Query Match             0.8%;  Score 16;  DB 4;  Length 24;
  Best Local Similarity   100.0%;  Pred. No. 2.3e+02;
  Matches   16;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;
```

```
Qy   1236 catccaccgagacctc 1251
          ||||||||||||||||
Db      8 CATCCACCGAGACCTC 23


RESULT  14
US-08-951-923-51/c
; Sequence 51, Application US/08951923
; Patent No. 6048693
;  GENERAL INFORMATION:
;    APPLICANT:  Bitter, Grant
;    TITLE OF INVENTION:  PHENOTYPIC ASSAYS OF CYCLIN/CYCLIN-DEPENDENT KINASE
;    TITLE OF INVENTION:  FUNCTION
;    NUMBER OF SEQUENCES:  57
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Cooley Godward LLP
;      STREET:  5 Palo Alto Square, 3000 El Camino Real
;      CITY:  Palo Alto
;      STATE:  CA
;      COUNTRY:  US
;      ZIP:  94306-2155
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/951,923
;      FILING DATE:  October 16, 1997
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Neeley, Richard L.
;      REGISTRATION NUMBER:  30,092
;      REFERENCE/DOCKET NUMBER:  BITT-001/02US
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  650 843-5000
;      TELEFAX:  650 857-0663
;      TELEX:  380816COOLEYPA
;  INFORMATION FOR SEQ ID NO:  51:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  18
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single stranded
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
US-08-951-923-51


  Query Match             0.7%;  Score 15;  DB 3;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 7.1e+02;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy   1300 gactttggcctggcc 1314
          ||||||||||||||||
Db     18 GACTTTGGCCTGGCC 4


RESULT  15
US-08-584-040-6218/c
; Sequence 6218, Application US/08584040
; Patent No. 6346398
;  GENERAL INFORMATION:
;    APPLICANT:  Pavco, Pamela
;    APPLICANT:  McSwiggen, James
;    APPLICANT:  Stinchcomb, Dan T.
;    APPLICANT:  Escobedo, Jaime
;    TITLE OF INVENTION:  METHOD AND REAGENT FOR THE
;    TITLE OF INVENTION:  TREATMENT OF DISEASES OR
;    TITLE OF INVENTION:  CONDITIONS RELATED TO LEVELS
;    TITLE OF INVENTION:  OF VASCULAR ENDOTHELIAL
;    TITLE OF INVENTION:  GROWTH FACTOR
;    NUMBER OF SEQUENCES:  8502
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Lyon & Lyon
;      STREET:  633 West Fifth Street
;      STREET:  Suite 4700
;      CITY:  Los Angeles
;      STATE:  California
;      COUNTRY:  U.S.A.
;      ZIP:  90071-2066
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb
;      MEDIUM TYPE:  storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  IBM P.C. DOS 5.0
;      SOFTWARE:  Word Perfect 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/584,040
;      FILING DATE:  January 11, 1996
;      CLASSIFICATION:  514
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  60/005,974
;      FILING DATE:  October 26, 1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Warburg, Richard J.
;      REGISTRATION NUMBER:  32,327
;      REFERENCE/DOCKET NUMBER:  218/064
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (213) 489-1600
;      TELEFAX:  (213) 955-0440
;      TELEX:  67-3510
;  INFORMATION FOR SEQ ID NO:  6218:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  18 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-584-040-6218


  Query Match             0.7%;  Score 15;  DB 4;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 7.1e+02;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    666 cgaccctcggcaggg 680
          ||||||||||||||||
Db     18 CGACCCTCGGCAGGG 4


RESULT  16
US-08-400-580A-11
; Sequence 11, Application US/08400580A
; Patent No. 5693501
;  GENERAL INFORMATION:
;    APPLICANT:  Lee, Chao-Hung
;    APPLICANT:  Jiang, Bingdong
;    TITLE OF INVENTION:  Compounds and Methods To Determine
;    TITLE OF INVENTION:  Presence of Histoplasma Capsulatum
;    NUMBER OF SEQUENCES:  14
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Kristine H. Johnson
;      STREET:  123 No. 5693501th College Ave, Ste 213
;      CITY:  Fort Collins
;      STATE:  CO
;      COUNTRY:  USA
;      ZIP:  80524
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/400,580A
```

```
;      FILING DATE:  08-MAR-1995
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Johnson, Kristine H.
;      REGISTRATION NUMBER:  36,835
;      REFERENCE/DOCKET NUMBER:  P-1011
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (970) 472-9650
;      TELEFAX:  (970) 472-9655
;  INFORMATION FOR SEQ ID NO:  11:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  19 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  RNA
US-08-400-580A-11


  Query Match             0.7%;  Score 15;  DB 1;  Length 19;
  Best Local Similarity   100.0%;  Pred. No. 7.1e+02;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy   1051 aagctggtcaaactt 1065
          |||||||||||||||
Db      1 AAGCTGGTCAAACTT 15


RESULT  17
US-08-942-423-51
; Sequence 51, Application US/08942423
; Patent No. 5891673
;  GENERAL INFORMATION:
;    APPLICANT:  Hashimoto, Yasuhiro
;    APPLICANT:  Takemoto, Yoshihiro
;    TITLE OF INVENTION:  Lck Binding Protein
;    NUMBER OF SEQUENCES:  68
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Syntex (U.S.A.) Inc.
;      STREET:  3401 Hillview Ave.
;      CITY:  Palo Alto
;      STATE:  California
;      COUNTRY:  U.S.A.
;      ZIP:  94303
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/942,423
;      FILING DATE:  01-OCT-1997
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/362,715
;      FILING DATE:  23-DEC-1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Peries, Rohan
;      REGISTRATION NUMBER:  35,752
;      REFERENCE/DOCKET NUMBER:  28260
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (415) 852-1698
;      TELEFAX:  (415) 496-3529
;  INFORMATION FOR SEQ ID NO:  51:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  31 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  other nucleic acid
;      DESCRIPTION:  /desc = "PCR primer"
US-08-942-423-51


  Query Match             0.7%;  Score 15;  DB 2;  Length 31;
  Best Local Similarity   100.0%;  Pred. No. 7.2e+02;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    358 gccctgtatgattac 372
          |||||||||||||||
Db     17 GCCCTGTATGATTAC 31


RESULT  18
US-08-951-923-52
; Sequence 52, Application US/08951923
; Patent No. 6048693
;  GENERAL INFORMATION:
;    APPLICANT:  Bitter, Grant
;    TITLE OF INVENTION:  PHENOTYPIC ASSAYS OF CYCLIN/CYCLIN-DEPENDENT KINASE
;    TITLE OF INVENTION:  FUNCTION
;    NUMBER OF SEQUENCES:  57
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Cooley Godward LLP
;      STREET:  5 Palo Alto Square, 3000 El Camino Real
;      CITY:  Palo Alto
;      STATE:  CA
;      COUNTRY:  US
;      ZIP:  94306-2155
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/951,923
;      FILING DATE:  October 16, 1997
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Neeley, Richard L.
;      REGISTRATION NUMBER:  30,092
;      REFERENCE/DOCKET NUMBER:  BITT-001/02US
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  650 843-5000
;      TELEFAX:  650 857-0663
;      TELEX:  380816COOLEYPA
;  INFORMATION FOR SEQ ID NO:  52:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  36
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single stranded
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
US-08-951-923-52


  Query Match             0.7%;  Score 15;  DB 3;  Length 36;
  Best Local Similarity   100.0%;  Pred. No. 7.2e+02;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy   1300 gactttggcctggcc 1314
          |||||||||||||||
Db      1 GACTTTGGCCTGGCC 15


RESULT  19
US-08-724-586-3/c
; Sequence 3, Application US/08724586
; Patent No. 6066469
;  GENERAL INFORMATION:
;    APPLICANT:  Kruzel, Marian L.
;    APPLICANT:  Kurecki, Tomasz
;    APPLICANT:  Gollnick, Paul D.
;    APPLICANT:  Doyle, Darrell J.
```

```
;    TITLE OF INVENTION:  Cloning, Expression, and Uses of Human
;    TITLE OF INVENTION:  Lactoferrin
;    NUMBER OF SEQUENCES:  8
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Jacobson, Price, Holman & Stern
;      STREET:  400 Seventh St. N.W.
;      CITY:  Washington D.C.
;      COUNTRY:  U.S.A.
;      ZIP:  20004
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/724,586
;      FILING DATE:  30-SEPT-1996
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/238,445
;      FILING DATE:  05-MAY-1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Player, William E.
;      REGISTRATION NUMBER:  31,409
;      REFERENCE/DOCKET NUMBER:  10505/P58185C
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (202) 638-6666
;      TELEFAX:  (202) 393-5350
; INFORMATION FOR SEQ ID NO:  3:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  36 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
US-08-724-586-3


  Query Match             0.7%;  Score 15;  DB 3;  Length 36;
  Best Local Similarity   100.0%;  Pred. No. 7.2e+02;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    1460 cctacggccggatcc 1474
           |||||||||||||||
Db      18 CCTACGGCCGGATCC 4


RESULT  20
US-09-421-632-3/c
; Sequence 3, Application US/09421632
; Patent No. 6277817
;  GENERAL INFORMATION:
;    APPLICANT:  Kruzel, Marian L.
;    APPLICANT:  Kurecki, Tomasz
;    APPLICANT:  Gollnick, Paul D.
;    APPLICANT:  Doyle, Darrell J.
;    TITLE OF INVENTION:  Cloning, Expression, and Uses of Human
;    TITLE OF INVENTION:  Lactoferrin
;    NUMBER OF SEQUENCES:  8
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Jacobson, Price, Holman & Stern
;      STREET:  400 Seventh St. N.W.
;      CITY:  Washington D.C.
;      COUNTRY:  U.S.A.
;      ZIP:  20004
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/09/421,632
;      FILING DATE:
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/724,586
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Player, William E.
;      REGISTRATION NUMBER:  31,409
;      REFERENCE/DOCKET NUMBER:  10505/P58185C
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (202) 638-6666
;      TELEFAX:  (202) 393-5350
; INFORMATION FOR SEQ ID NO:  3:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  36 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
;    HYPOTHETICAL:  NO
;    ANTI-SENSE:  NO
US-09-421-632-3


  Query Match             0.7%;  Score 15;  DB 4;  Length 36;
  Best Local Similarity   100.0%;  Pred. No. 7.2e+02;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    1460 cctacggccggatcc 1474
           |||||||||||||||
Db      18 CCTACGGCCGGATCC 4


RESULT  21
US-08-039-198B-3/c
; Sequence 3, Application US/08039198B
; Patent No. 5858725
;  GENERAL INFORMATION:
;    APPLICANT:  CROWE, JAMES SCOTT
;    APPLICANT:  LEWIS, ALAN PETER
;    TITLE OF INVENTION:  PREPARATION OF CHIMAERIC ANTIBODIES
;    TITLE OF INVENTION:  RECOMBINANT PCR STRATEGY
;    NUMBER OF SEQUENCES:  31
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  NIXON & VANDERHYE P.C.
;      STREET:  1100 NORTH GLEBE ROAD
;      CITY:  ARLINGTON
;      STATE:  VIRGINIA
;      COUNTRY:  U.S.A.
;      ZIP:  22201-4714
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/039,198B
;      FILING DATE:  29-JUL-1993
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/GB91/01744
;      FILING DATE:  08-OCT-91
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  WILSON, MARY J.
;      REGISTRATION NUMBER:  32,955
;      REFERENCE/DOCKET NUMBER:  1430-86
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (703) 816-4000
;      TELEFAX:  (703) 816-4100
;  INFORMATION FOR SEQ ID NO:  3:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  45 base pairs
```

```
;       TYPE:  nucleic acid
;       STRANDEDNESS:  single
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  ssDNA
;     HYPOTHETICAL:  NO
;     ANTI-SENSE:  NO
US-08-039-198B-3


  Query Match             0.7%;  Score 15;  DB 2;  Length 45;
  Best Local Similarity   100.0%;  Pred. No. 7.2e+02;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    745 agcaccttcagcact 759
          ||||||||||||||||
Db     33 AGCACCTTCAGCACT 19


RESULT  22
US-08-707-237A-47
; Sequence 47, Application US/08707237A
; Patent No. 5830713
;  GENERAL INFORMATION:
;     APPLICANT:  Ferrari, Franco A.
;     APPLICANT:  Capello, Joseph
;     APPLICANT:  Crissman, John W.
;     APPLICANT:  Dorman, Mary A.
;     TITLE OF INVENTION:  METHODS FOR PREPARING SYNTHETIC
;     TITLE OF INVENTION:  REPETITIVE DNA
;     NUMBER OF SEQUENCES:  108
;     CORRESPONDENCE ADDRESS:
;       ADDRESSEE:  Flehr, Hohbach, Test, Albritton & Herbert
;       STREET:  Four Embarcadero Center, Suite 3400
;       CITY:  San Francisco
;       STATE:  California
;       COUNTRY:  United States
;       ZIP:  94111-4187
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.30
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/08/707,237A
;       FILING DATE:  03-SEP-1996
;       CLASSIFICATION:  435
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  US 08/175,155
;       FILING DATE:  29-DEC-1993
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  US 08/053,049
;       FILING DATE:  22-APR-1993
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  US 07/609,716
;       FILING DATE:  06-NOV-1990
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  US 07/269,429
;       FILING DATE:  09-NOV-1988
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  US 07/114,618
;       FILING DATE:  29-OCT-1987
;     PRIOR APPLICATION DATA:
;       APPLICATION NUMBER:  US 06/927,258
;       FILING DATE:  04-NOV-1986
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  Trecartin, Richard F.
;       REGISTRATION NUMBER:  31,801
;       REFERENCE/DOCKET NUMBER:  A-55186-10/WHD
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (415) 781-1989
;       TELEFAX:  (415) 398-3249
;       TELEX:  910 277299
;  INFORMATION FOR SEQ ID NO:  47:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  72 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  unknown
;       TOPOLOGY:  unknown
;     MOLECULE TYPE:  DNA (genomic)
US-08-707-237A-47


  Query Match             0.7%;  Score 15;  DB 2;  Length 72;
  Best Local Similarity   100.0%;  Pred. No. 7.3e+02;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy   1748 catccgccagggccc 1762
          ||||||||||||||||
Db     27 CATCCGCCAGGGCCC 41


RESULT  23
US-09-058-389A-19
; Sequence 19, Application US/09058389A
; Patent No. 6130065
;  GENERAL INFORMATION:
;     APPLICANT:  Belt, Judith A.
;     APPLICANT:  Crawford, Charles R.
;     APPLICANT:  Patel, Divyen
;     TITLE OF INVENTION:  A NITROBENZYLMERCAPTOPURINERIBOSIDE
;     TITLE OF INVENTION:  (NBMPR)-INSENSITIVE, EQUILIBRATIVE, NUCLEOSIDE TRANSPORT
;     TITLE OF INVENTION:  PROTEIN, NUCLEIC ACIDS ENCODING THE SAME AND METHODS OF
;     TITLE OF INVENTION:  USE
;     NUMBER OF SEQUENCES:  22
;     CORRESPONDENCE ADDRESS:
;       ADDRESSEE:  David A. Jackson, Esq.
;       STREET:  411 Hackensack Ave, Continental Plaza, 4th
;       STREET:  Floor
;       CITY:  Hackensack
;       STATE:  New Jersey
;       COUNTRY:  USA
;       ZIP:  07601
;     COMPUTER READABLE FORM:
;       MEDIUM TYPE:  Floppy disk
;       COMPUTER:  IBM PC compatible
;       OPERATING SYSTEM:  PC-DOS/MS-DOS
;       SOFTWARE:  PatentIn Release #1.0, Version #1.30
;     CURRENT APPLICATION DATA:
;       APPLICATION NUMBER:  US/09/058,389A
;       FILING DATE:  April 9, 1998
;       CLASSIFICATION:  800
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  Jackson Esq., David A.
;       REGISTRATION NUMBER:  26,742
;       REFERENCE/DOCKET NUMBER:  1340-1-013N
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  201-487-5800
;       TELEFAX:  201-343-1684
;  INFORMATION FOR SEQ ID NO:  19:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  104 base pairs
;       TYPE:  nucleic acid
;       STRANDEDNESS:  double
;       TOPOLOGY:  linear
;     MOLECULE TYPE:  other nucleic acid
;       DESCRIPTION:  /desc = "intron 9"
;     HYPOTHETICAL:  NO
US-09-058-389A-19


  Query Match             0.7%;  Score 15;  DB 3;  Length 104;
  Best Local Similarity   100.0%;  Pred. No. 7.3e+02;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy   1700 ggcagggcagggggt 1714
          ||||||||||||||||
```

```
Db      24 GGCAGGGCAGGGGGT 38


RESULT  24
US-09-461-697-78/c
; Sequence 78, Application US/09461697
; Patent No. 6277974
; GENERAL INFORMATION:
;  APPLICANT: COGENT NEUROSCIENCE, Inc.
;  APPLICANT: Lo, Donald C.
;  APPLICANT: Barney, Shawn
;  APPLICANT: Thomas, Mary Beth
;  APPLICANT: Portbury, Stuart D.
;  APPLICANT: Puranam, Kasturi
;  APPLICANT: Katz, Lawrence C.
;  TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR DIAGNOSING
;  TITLE OF INVENTION: AND TREATING CONDITIONS, DISORDERS, OR DISEASES INVOLVING
;  TITLE OF INVENTION: CELL DEATH
;  FILE REFERENCE: 10001-005-999
;  CURRENT APPLICATION NUMBER: US/09/461,697
;  CURRENT FILING DATE: 1999-12-14
;  NUMBER OF SEQ ID NOS: 466
;  SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 78
;   LENGTH: 105
;   TYPE: DNA
;   ORGANISM: Homo sapiens
US-09-461-697-78


  Query Match             0.7%;  Score 15;  DB 4;  Length 105;
  Best Local Similarity   100.0%;  Pred. No. 7.3e+02;
  Matches   15;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy      75 atggctctgagggga 89
           ||||||||||||||||
Db      75 ATGGCTCTGAGGGGA 61


RESULT  25
US-08-584-040-7661
; Sequence 7661, Application US/08584040
; Patent No. 6346398
;  GENERAL INFORMATION:
;    APPLICANT:  Pavco, Pamela
;    APPLICANT:  McSwiggen, James
;    APPLICANT:  Stinchcomb, Dan T.
;    APPLICANT:  Escobedo, Jaime
;    TITLE OF INVENTION:  METHOD AND REAGENT FOR THE
;    TITLE OF INVENTION:  TREATMENT OF DISEASES OR
;    TITLE OF INVENTION:  CONDITIONS RELATED TO LEVELS
;    TITLE OF INVENTION:  OF VASCULAR ENDOTHELIAL
;    TITLE OF INVENTION:  GROWTH FACTOR
;    NUMBER OF SEQUENCES:  8502
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Lyon & Lyon
;      STREET:  633 West Fifth Street
;      STREET:  Suite 4700
;      CITY:  Los Angeles
;      STATE:  California
;      COUNTRY:  U.S.A.
;      ZIP:  90071-2066
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb
;      MEDIUM TYPE:  storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  IBM P.C. DOS 5.0
;      SOFTWARE:  Word Perfect 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/584,040
;      FILING DATE:  January 11, 1996
;      CLASSIFICATION:  514
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  60/005,974
;      FILING DATE:  October 26, 1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Warburg, Richard J.
;      REGISTRATION NUMBER:  32,327
;      REFERENCE/DOCKET NUMBER:  218/064
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (213) 489-1600
;      TELEFAX:  (213) 955-0440
;      TELEX:  67-3510
;  INFORMATION FOR SEQ ID NO:  7661:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  17 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-584-040-7661


  Query Match             0.7%;  Score 14;  DB 4;  Length 17;
  Best Local Similarity   71.4%;  Pred. No. 2.2e+03;
  Matches   10;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy   1300 gactttggcctggc 1313
          |||:::||||:|||
Db      4 GACUUUGGCCUGGC 17


RESULT  26
US-08-105-483-197/c
; Sequence 197, Application US/08105483
; Patent No. 5494807
;  GENERAL INFORMATION:
;    APPLICANT:  Paoletti, Enzo
;    TITLE OF INVENTION:  GENETICALLY ENGINEERED VACCINE
;    TITLE OF INVENTION:  STRAIN
;    NUMBER OF SEQUENCES:  462
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Curtis, Morris & Safford
;      ADDRESSEE:  c/o William S. Frommer
;      STREET:  530 Fifth Avenue
;      CITY:  New York
;      STATE:  NY
;      COUNTRY:  USA
;      ZIP:  10036
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/105,483
;      FILING DATE:  12-AUG-1993
;      CLASSIFICATION:  424
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/847,951
;      FILING DATE:  06-MAR-1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Frommer, William S.
;      REGISTRATION NUMBER:  25,506
;      REFERENCE/DOCKET NUMBER:  454310-2400
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 840-3333
;      TELEFAX:  (212) 840-0712
;  INFORMATION FOR SEQ ID NO:  197:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  18 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-105-483-197
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  Query Match             0.7%;  Score 14;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 2.2e+03;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy      56 gatgaagacgatga 69
           ||||||||||||||
Db      14 GATGAAGACGATGA 1


RESULT  27
US-08-220-151-78/c
; Sequence 78, Application US/08220151
; Patent No. 5529780
;  GENERAL INFORMATION:
;    APPLICANT:  Paoletti, Enzo
;    APPLICANT:  Limbach, Keith J.
;    TITLE OF INVENTION:  NUCLEOTIDE AND AMINO ACID SEQUENCES OF
;    TITLE OF INVENTION:  CANINE HERPESVIRUS gB, gC AND gD AND USES THEREFOR
;    NUMBER OF SEQUENCES:  91
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Curtis, Morris & Safford
;      STREET:  530 Fifth Avenue
;      CITY:  New York
;      STATE:  NY
;      COUNTRY:  USA
;      ZIP:  10036
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/220,151
;      FILING DATE:  30-MAR-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Frommer, William S.
;      REGISTRATION NUMBER:  25,506
;      REFERENCE/DOCKET NUMBER:  454310-2540
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 840-3333
;      TELEFAX:  (212) 840-0712
;      TELEX:  425066 CURTMS
;  INFORMATION FOR SEQ ID NO:  78:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  18 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
US-08-220-151-78


  Query Match             0.7%;  Score 14;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 2.2e+03;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy      56 gatgaagacgatga 69
           ||||||||||||||
Db      14 GATGAAGACGATGA 1


RESULT  28
US-08-413-118-78/c
; Sequence 78, Application US/08413118
; Patent No. 5688920
;  GENERAL INFORMATION:
;    APPLICANT:  PAOLETTI, ENZO
;    APPLICANT:  LIMBACH, KEITH J.
;    TITLE OF INVENTION:  NUCLEOTIDE AND AMINO ACID SEQUENCES OF
;    TITLE OF INVENTION:  CANINE HERPESVIRUS gB, gC, AND gD AND USES THEREFOR
;    NUMBER OF SEQUENCES:  128
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  CURTIS, MORRIS & SAFFORD, P.C.
;      STREET:  530 FIFTH AVENUE, 25TH FLOOR
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  UNITED STATES OF AMERICA
;      ZIP:  10036
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/413,118
;      FILING DATE:  29-MAR-1995
;      CLASSIFICATION:
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/220,151
;      FILING DATE:  30-MAR-1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  FROMMER, WILLIAM S.
;      REGISTRATION NUMBER:  25,506
;      REFERENCE/DOCKET NUMBER:  454310-2670
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 840-3333
;      TELEFAX:  (212) 840-0712
;  INFORMATION FOR SEQ ID NO:  78:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  18 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
US-08-413-118-78


  Query Match             0.7%;  Score 14;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 2.2e+03;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy      56 gatgaagacgatga 69
           ||||||||||||||
Db      14 GATGAAGACGATGA 1


RESULT  29
US-08-224-657-54/c
; Sequence 54, Application US/08224657
; Patent No. 5756102
;  GENERAL INFORMATION:
;    APPLICANT:  Paoletti, Enzo
;    APPLICANT:  Tartaglia, James
;    APPLICANT:  Taylor, Jill
;    TITLE OF INVENTION:  POXVIRUS - CANINE DISTEMPER VIRUS (CDV)
;    TITLE OF INVENTION:  RECOMBINANTS AND COMPOSITIONS AND METHODS EMPLOYING THE
;    TITLE OF INVENTION:  RECOMBINANTS
;    NUMBER OF SEQUENCES:  122
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Curtis, Morris & Safford, P.C.
;      STREET:  530 Fifth Avenue
;      CITY:  New York
;      STATE:  New York
;      COUNTRY:  USA
;      ZIP:  10036
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/224,657
;      FILING DATE:  06-APR-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
```

```
;      NAME:  Frommer, William S.
;      REGISTRATION NUMBER:  25,506
;      REFERENCE/DOCKET NUMBER:  454310-2550
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 840-3333
;      TELEFAX:  (212) 840-0712
;      TELEX:  425066 CURTMS
;  INFORMATION FOR SEQ ID NO:  54:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  18 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
US-08-224-657-54


  Query Match             0.7%;  Score 14;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 2.2e+03;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy      56 gatgaagacgatga 69
           ||||||||||||||
Db      14 GATGAAGACGATGA 1


RESULT  30
US-08-709-209-197/c
; Sequence 197, Application US/08709209
; Patent No. 5762938
;  GENERAL INFORMATION:
;    APPLICANT:  Paoletti, Enzo
;    TITLE OF INVENTION:  GENETICALLY ENGINEERED VACCINE
;    TITLE OF INVENTION:  STRAIN
;    NUMBER OF SEQUENCES:  462
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Curtis, Morris & Safford
;      ADDRESSEE:  c/o William S. Frommer
;      STREET:  530 Fifth Avenue
;      CITY:  New York
;      STATE:  NY
;      COUNTRY:  USA
;      ZIP:  10036
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/709,209
;      FILING DATE:  21-AUG-1996
;      CLASSIFICATION:  424
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 08/105,483
;      FILING DATE:  12-AUG-1993
;      APPLICATION NUMBER:  US 07/847,951
;      FILING DATE:  06-MAR-1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Frommer, William S.
;      REGISTRATION NUMBER:  25,506
;      REFERENCE/DOCKET NUMBER:  454310-2400
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 840-3333
;      TELEFAX:  (212) 840-0712
;  INFORMATION FOR SEQ ID NO:  197:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  18 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-709-209-197


  Query Match             0.7%;  Score 14;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 2.2e+03;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy      56 gatgaagacgatga 69
           ||||||||||||||
Db      14 GATGAAGACGATGA 1


RESULT  31
US-08-458-101-197/c
; Sequence 197, Application US/08458101
; Patent No. 5766599
;  GENERAL INFORMATION:
;    APPLICANT:  Paoletti, Enzo
;    APPLICANT:  Perkus, Marion E.
;    APPLICANT:  Taylor, Jill
;    APPLICANT:  Tartaglia, James
;    APPLICANT:  No. 5766599ton, Elizabeth K.
;    APPLICANT:  Riviere, Michel
;    APPLICANT:  de Taisne, Charles
;    APPLICANT:  Limbach, Keith J.
;    APPLICANT:  Johnson, Gerard P.
;    APPLICANT:  Pincus, Steven E.
;    APPLICANT:  Cox, William I.
;    APPLICANT:  Audonnet, Jean-Christophe Francis
;    APPLICANT:  Gettig, Russell Robert
;    TITLE OF INVENTION:  GENETICALLY ENGINEERED VACCINE
;    TITLE OF INVENTION:  STRAIN
;    NUMBER OF SEQUENCES:  467
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Curtis, Morris & Safford
;      ADDRESSEE:  c/o William S. Frommer
;      STREET:  530 Fifth Avenue
;      CITY:  New York
;      STATE:  NY
;      COUNTRY:  USA
;      ZIP:  10036
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/458,101
;      FILING DATE:  01-JUN-1995
;      CLASSIFICATION:  424
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Frommer, William S.
;      REGISTRATION NUMBER:  25,506
;      REFERENCE/DOCKET NUMBER:  454310-2740
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 840-3333
;      TELEFAX:  (212) 840-0712
;  INFORMATION FOR SEQ ID NO:  197:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  18 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-458-101-197


  Query Match             0.7%;  Score 14;  DB 1;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 2.2e+03;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy      56 gatgaagacgatga 69
           ||||||||||||||
Db      14 GATGAAGACGATGA 1


RESULT  32
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US-08-184-009-52/c
; Sequence 52, Application US/08184009
; Patent No. 5833975
;  GENERAL INFORMATION:
;    APPLICANT:  Paoletti, Enzo
;    APPLICANT:  Tartaglia, James
;    APPLICANT:  Cox, William I.
;    TITLE OF INVENTION:  RECOMBINANT VIRUS IMMUNOTHERAPY
;    NUMBER OF SEQUENCES:  217
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Curtis, Morris & Safford
;      STREET:  530 Fifth Avenue
;      CITY:  New York
;      STATE:  NY
;      COUNTRY:  USA
;      ZIP:  10036
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/184,009
;      FILING DATE:  19-JAN-1994
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Frommer, William S.
;      REGISTRATION NUMBER:  25,506
;      REFERENCE/DOCKET NUMBER:  454310-2530
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (212) 840-3333
;      TELEFAX:  (212) 840-0712
;      TELEX:  425066CURTMS
;  INFORMATION FOR SEQ ID NO:  52:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  18 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  cDNA
US-08-184-009-52


  Query Match             0.7%;  Score 14;  DB 2;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 2.2e+03;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy      56 gatgaagacgatga 69
           ||||||||||||||
Db      14 GATGAAGACGATGA 1


RESULT  33
US-08-173-489C-11
; Sequence 11, Application US/08173489C
; Patent No. 5861244
;  GENERAL INFORMATION:
;    APPLICANT:  WANG, C. -G.
;    APPLICANT:  HEPBURN, A. G.
;    TITLE OF INVENTION:  GENETIC SEQUENCE ASSAY USING DNA
;    TITLE OF INVENTION:  TRIPLE-STRAND FORMATION.
;    NUMBER OF SEQUENCES:  365
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  PROFILE DIAGNOSTIC SCIENCES, INC.,
;      STREET:  510 EAST 73RD STREET,
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10021.
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5 inch, 1.44Mb storage
;      COMPUTER:  IBM PC/XT/AT
;      OPERATING SYSTEM:  MS-DOS version 6.2
;      SOFTWARE:  Wordperfect Version 5.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/173,489C
;      FILING DATE:  22 DEC 1993
;      CLASSIFICATION:  435
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  US 07/968,436
;      FILING DATE:  29 OCT 1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Handelman, Joseph H.
;      REGISTRATION NUMBER:  26,179
;      REFERENCE/DOCKET NUMBER:  U9518-6
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (attorney) (212) 708-1880
;      TELEFAX:  (attorney) (212) 246-8959
;  INFORMATION FOR SEQ ID NO:  11:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  18 base pairs
;      TYPE:  Nucleic Acid
;      STRANDEDNESS:  double
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  Genomic DNA
;      DESCRIPTION:  c-myc gene (Accession # X00364,
;      DESCRIPTION:  K01908, V00501) nucleotides 6663 to 6680
;    HYPOTHETICAL:  No
;    ANTI-SENSE:  No
;    ORIGINAL SOURCE:
;      ORGANISM:  Homo sapiens
;    PUBLICATION INFORMATION:
;      AUTHORS:  Gazin, C,  Dupont, S,  de Dinechin, D,
;      AUTHORS:  Hampe, A, Masson, J M,  Martin, P,  Stehelin,
;      AUTHORS:  D,  Galibert, F.
;      TITLE:  Nucleotide sequence of the
;      TITLE:  human c-myc locus: provocative open reading
;      TITLE:  frame within the first exon.
;      JOURNAL:  EMBO Journal
;      VOLUME:  3
;      PAGES:  383-387
;      DATE:  1984
;      AUTHORS:  Colby, W W,  Chen, E Y,  Smith, D H,
;      AUTHORS:  Levinson, A D.
;      TITLE:  Identification and nucleotide
;      TITLE:  sequence of a human locus homologous to the v-
;      TITLE:  myc oncogene of avian myelocytomatosis virus
;      TITLE:  MC29
;      JOURNAL:  Nature
;      VOLUME:  301
;      PAGES:  722-725
;      DATE:  1983
;      AUTHORS:  Saito, H,  Hayday, A C,  Wiman, K G,
;      AUTHORS:  Hayward, W S,  Tonegawa, S.
;      TITLE:  Activation of the c-myc gene
;      TITLE:  by translocation: a model for translational
;      TITLE:  control
;      JOURNAL:  Proceedings of the National Academy of
;      JOURNAL:  Sciences, USA
;      VOLUME:  80
;      PAGES:  7476-7480
;      DATE:  1983
;      AUTHORS:  Gazin, C,  Rigolet, M,  Briand, J P,  Van
;      AUTHORS:  Regenmortel, M H V,  Galibert, F.
;      TITLE:  Immunochemical detection of
;      TITLE:  proteins related to the human c-myc exon 1
;      JOURNAL:  EMBO Journal
;      VOLUME:  5
;      PAGES:  2241-2250
;      DATE:  1986
;      RELEVANT RESIDUES IN SEQ ID NO:  11 :FROM 1 TO 18
US-08-173-489C-11


  Query Match             0.7%;  Score 14;  DB 2;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 2.2e+03;
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  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy      11 gaagatgaggaaga 24
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Db       3 GAAGATGAGGAAGA 16


RESULT  34
US-08-417-210A-52/c
; Sequence 52, Application US/08417210A
; Patent No. 5863542
;  GENERAL INFORMATION:
;    APPLICANT:  PAOLETTI, ENZO
;    APPLICANT:  TARTAGLIA, JAMES
;    APPLICANT:  COX, WILLIAM I.
;    TITLE OF INVENTION:  IMMUNODEFICIENCY RECOMBINANT POXVIRUS
;    NUMBER OF SEQUENCES:  148
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  CURTIS, MORRIS & SAFFORD, P.C.
;      STREET:  530 FIFTH AVENUE
;      CITY:  NEW YORK
;      STATE:  NEW YORK
;      COUNTRY:  USA
;      ZIP:  10036
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Versión #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/417,210A
;      FILING DATE:  05-APR-1995
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  KOWALSKI, THOMAS J.
;      REGISTRATION NUMBER:  32,147
;      REFERENCE/DOCKET NUMBER:  454310-2690
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  212-840-3333
;  INFORMATION FOR SEQ ID NO:  52:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  18 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  DNA (genomic)
US-08-417-210A-52


  Query Match             0.7%;  Score 14;  DB 2;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 2.2e+03;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy      56 gatgaagacgatga 69
           ||||||||||||||
Db      14 GATGAAGACGATGA 1


RESULT  35
US-08-585-684B-2737/c
; Sequence 2737, Application US/08585684B
; Patent No. 5877021
;  GENERAL INFORMATION:
;    APPLICANT:  Stinchcomb, Daniel T.
;    APPLICANT:  Jarvis, Thale
;    APPLICANT:  McSwiggen, James
;    TITLE OF INVENTION:  METHOD AND REAGENT FOR THE
;    TITLE OF INVENTION:  INDUCTION OF GRAFT TOLERANCE
;    TITLE OF INVENTION:  AND REVERSAL OF IMMUNE RESPONSES
;    NUMBER OF SEQUENCES:  2751
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Lyon & Lyon
;      STREET:  633 West Fifth Street
;      STREET:  Suite 4700
;      CITY:  Los Angeles
;      STATE:  California
;      COUNTRY:  U.S.A.
;      ZIP:  90071
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  3.5" Diskette, 1.44 Mb
;      MEDIUM TYPE:  storage
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  IBM P.C. DOS 5.0
;      SOFTWARE:  FastSEQ Version 1.5
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/585,684B
;      FILING DATE:  January 16, 1996
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  60/000,951
;      FILING DATE:  July 7, 1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Warburg, Richard
;      REGISTRATION NUMBER:  32,327
;      REFERENCE/DOCKET NUMBER:  218/078
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (213) 489-1600
;      TELEFAX:  (213) 955-0440
;      TELEX:  67-3510
;  INFORMATION FOR SEQ ID NO:  2737:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  18 base pairs
;      TYPE:  nucleic acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
US-08-585-684B-2737


  Query Match             0.7%;  Score 14;  DB 2;  Length 18;
  Best Local Similarity   100.0%;  Pred. No. 2.2e+03;
  Matches   14;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy    1155 cagcaagcagccat 1168
           ||||||||||||||
Db      15 CAGCAAGCAGCCAT 2


Search completed: May 17, 2002, 18:18:30
Job time: 6691 sec
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GenCore version 4.5

OM nucleic - nucleic search, using sw model

Run on: May 17, 2002, 16:26:59 ; Search time 90.41 Seconds
(without alignments)
5474.522 Million cell updates/sec

Title: US-10-007-010-3
Perfect score: 2015
Sequence: 1 cggaggcacggaagatgagg.....atataaatgcaagtcttacg 2015

Scoring table: OLIGO_NUC
Gapop 60.0 , Gapext 60.0

Searched: 383533 seqs, 122816752 residues

Word size : 0

Total number of hits satisfying chosen parameters: 615614

Minimum DB seq length: 0
Maximum DB seq length: 105

Post-processing: Listing first 65 summaries

Database : Issued_Patents_NA:*
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2: /cgn2_6/ptodata/2/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/2/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/2/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/2/ina/PCTUS_COMB.seq:*
6: /cgn2_6/ptodata/2/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.		Score	% Query Match	Length	DB	ID	Description
c	1	18	0.9	20	2	US-08-910-629A-31	Sequence 31, Appl
	2	18	0.9	20	2	US-08-910-629A-42	Sequence 42, Appl
c	3	18	0.9	20	3	US-09-209-668-7	Sequence 7, Appli
c	4	18	0.9	20	3	US-09-287-796-31	Sequence 31, Appl
	5	18	0.9	20	3	US-09-287-796-42	Sequence 42, Appl
c	6	18	0.9	20	4	US-09-130-616-31	Sequence 31, Appl
	7	18	0.9	20	4	US-09-130-616-42	Sequence 42, Appl
c	8	17	0.8	20	2	US-08-730-876-2	Sequence 2, Appli
c	9	17	0.8	20	4	US-09-490-692-71	Sequence 71, Appl
c	10	17	0.8	23	1	US-08-222-616-2	Sequence 2, Appli
c	11	17	0.8	23	5	PCT-US95-04228-2	Sequence 2, Appli
	12	16	0.8	24	2	US-08-859-998-598	Sequence 598, App
	13	16	0.8	24	4	US-09-225-928-598	Sequence 598, App
c	14	15	0.7	18	3	US-08-951-923-51	Sequence 51, Appl
c	15	15	0.7	18	4	US-08-584-040-6218	Sequence 6218, Ap
	16	15	0.7	19	1	US-08-400-580A-11	Sequence 11, Appl
	17	15	0.7	31	2	US-08-942-423-51	Sequence 51, Appl
	18	15	0.7	36	3	US-08-951-923-52	Sequence 52, Appl
c	19	15	0.7	36	3	US-08-724-586-3	Sequence 3, Appli
c	20	15	0.7	36	4	US-09-421-632-3	Sequence 3, Appli
c	21	15	0.7	45	2	US-08-039-198B-3	Sequence 3, Appli
	22	15	0.7	72	2	US-08-707-237A-47	Sequence 47, Appl
	23	15	0.7	104	3	US-09-058-389A-19	Sequence 19, Appl
c	24	15	0.7	105	4	US-09-461-697-78	Sequence 78, Appl
	25	14	0.7	17	4	US-08-584-040-7661	Sequence 7661, Ap
c	26	14	0.7	18	1	US-08-105-483-197	Sequence 197, App
c	27	14	0.7	18	1	US-08-220-151-78	Sequence 78, Appl
c	28	14	0.7	18	1	US-08-413-118-78	Sequence 78, Appl
c	29	14	0.7	18	1	US-08-224-657-54	Sequence 54, Appl
c	30	14	0.7	18	1	US-08-709-209-197	Sequence 197, App
c	31	14	0.7	18	1	US-08-458-101-197	Sequence 197, App
c	32	14	0.7	18	2	US-08-184-009-52	Sequence 52, Appl
	33	14	0.7	18	2	US-08-173-489C-11	Sequence 11, Appl
c	34	14	0.7	18	2	US-08-417-210A-52	Sequence 52, Appl
c	35	14	0.7	18	2	US-08-585-684B-2737	Sequence 2737, Ap
c	36	14	0.7	18	2	US-08-458-356-52	Sequence 52, Appl
c	37	14	0.7	18	3	US-08-473-446-78	Sequence 78, Appl
c	38	14	0.7	18	4	US-09-038-073-2737	Sequence 2737, Ap
c	39	14	0.7	18	4	US-08-460-736-52	Sequence 52, Appl
c	40	14	0.7	18	4	US-09-354-138-54	Sequence 54, Appl
	41	14	0.7	20	1	US-08-639-763-6	Sequence 6, Appli
c	42	14	0.7	21	1	US-08-056-200-44	Sequence 44, Appl
c	43	14	0.7	21	2	US-08-800-644-44	Sequence 44, Appl
	44	14	0.7	21	3	US-08-953-094-66	Sequence 66, Appl
	45	14	0.7	22	1	US-07-955-916-2	Sequence 2, Appli
c	46	14	0.7	22	1	US-08-379-078-549	Sequence 549, App
c	47	14	0.7	22	4	US-07-974-409C-172	Sequence 172, App
c	48	14	0.7	22	5	PCT-US93-00977-172	Sequence 172, App
	49	14	0.7	24	1	US-07-842-349-17	Sequence 17, Appl
	50	14	0.7	24	1	US-08-151-574-39	Sequence 39, Appl
c	51	14	0.7	24	1	US-08-391-000-39	Sequence 39, Appl
	52	14	0.7	24	2	US-08-480-994-15	Sequence 15, Appl
	53	14	0.7	24	2	US-08-616-844-15	Sequence 15, Appl
	54	14	0.7	24	2	US-08-419-448-39	Sequence 39, Appl
	55	14	0.7	24	2	US-07-952-853-8	Sequence 8, Appli
c	56	14	0.7	24	2	US-08-741-931-39	Sequence 39, Appl
	57	14	0.7	24	2	US-08-599-654-15	Sequence 15, Appl
	58	14	0.7	24	2	US-08-485-573-15	Sequence 15, Appl
	59	14	0.7	24	2	US-08-914-848-8	Sequence 8, Appli
	60	14	0.7	24	3	US-08-944-868A-15	Sequence 15, Appl
	61	14	0.7	24	3	US-08-944-423A-15	Sequence 15, Appl
	62	14	0.7	24	3	US-08-925-743-15	Sequence 15, Appl
	63	14	0.7	24	3	US-08-944-496-15	Sequence 15, Appl
	64	14	0.7	24	4	US-08-925-767-15	Sequence 15, Appl
	65	14	0.7	24	4	US-09-233-510-39	Sequence 39, Appl

ALIGNMENTS

```
RESULT 1
US-08-910-629A-31/c
; Sequence 31, Application US/08910629A
; Patent No. 5877309 .
;  GENERAL INFORMATION:
;    APPLICANT:  Robert A. McKay
;    APPLICANT:  Nicholas M. Dean
;    APPLICANT:  Brett Monia
;    TITLE OF INVENTION:  ANTISENSE OLIGONUCLEOTIDE
;    TITLE OF INVENTION:  COMPOSITONS AND METHODS FOR THE MODULATION OF JNK
;    TITLE OF INVENTION:  PROTEINS
;    NUMBER OF SEQUENCES:  86
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Law Offices of Jane Massey Licata
;      STREET:  66 East Main Street
;      CITY:  Marlton
;      STATE:  NJ
;      COUNTRY:  USA
;      ZIP:  08053
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  DISKETTE, 3.5 INCH, 1.44 MB
;      MEDIUM TYPE:  STORAGE
;      COMPUTER:  PENTIUM
;      OPERATING SYSTEM:  WINDOWS 95
;      SOFTWARE:  WORDPERFECT 6.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/910,629A
;      FILING DATE:  August 13, 1997
;      CLASSIFICATION:  514
;    PRIOR APPLICATION DATA:
```

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;       APPLICATION NUMBER:
;       FILING DATE:
;     ATTORNEY/AGENT INFORMATION:
;       NAME:  Jane Massey Licata
;       REGISTRATION NUMBER:  32,257
;       REFERENCE/DOCKET NUMBER:  ISPH-0215
;     TELECOMMUNICATION INFORMATION:
;       TELEPHONE:  (609) 779-2400
;       TELEFAX:  (609) 779-8488
;   INFORMATION FOR SEQ ID NO:  31:
;     SEQUENCE CHARACTERISTICS:
;       LENGTH:  20
;       TYPE:  Nucleic Acid
;       STRANDEDNESS:  Single
;       TOPOLOGY:  Linear
;     ANTI-SENSE:  Yes
US-08-910-629A-31


  Query Match             0.9%;  Score 18;  DB 2;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 23;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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Db     20 GACTTTGGCCTGGCCCGG 3


RESULT   2
US-08-910-629A-42
; Sequence 42, Application US/08910629A
; Patent No. 5877309
;  GENERAL INFORMATION:
;    APPLICANT:  Robert A. McKay
;    APPLICANT:  Nicholas M. Dean
;    APPLICANT:  Brett Monia
;    TITLE OF INVENTION:  ANTISENSE OLIGONUCLEOTIDE
;    TITLE OF INVENTION:  COMPOSITONS AND METHODS FOR THE MODULATION OF JNK
;    TITLE OF INVENTION:  PROTEINS
;    NUMBER OF SEQUENCES:  86
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Law Offices of Jane Massey Licata
;      STREET:  66 East Main Street
;      CITY:  Marlton
;      STATE:  NJ
;      COUNTRY:  USA
;      ZIP:  08053
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  DISKETTE, 3.5 INCH, 1.44 MB
;      MEDIUM TYPE:  STORAGE
;      COMPUTER:  PENTIUM
;      OPERATING SYSTEM:  WINDOWS 95
;      SOFTWARE:  WORDPERFECT 6.1
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/910,629A
;      FILING DATE:  August 13, 1997
;      CLASSIFICATION:  514
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:
;      FILING DATE:
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Jane Massey Licata
;      REGISTRATION NUMBER:  32,257
;      REFERENCE/DOCKET NUMBER:  ISPH-0215
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (609) 779-2400
;      TELEFAX:  (609) 779-8488
;  INFORMATION FOR SEQ ID NO:  42:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  20
;      TYPE:  Nucleic Acid
;      STRANDEDNESS:  Single
;      TOPOLOGY:  Linear
;    ANTI-SENSE:  No
US-08-910-629A-42


  Query Match             0.9%;  Score 18;  DB 2;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 23;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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Db     1 GACTTTGGCCTGGCCCGG 18


RESULT   3
US-09-209-668-7/c
; Sequence 7, Application US/09209668A
; Patent No. 6114517
; GENERAL INFORMATION:
;  APPLICANT: Monia, Brett P.
;  APPLICANT: Xu, Xiaoxing S.
;  TITLE OF INVENTION: METHODS OF MODULATING TUMOR NECROSIS FACTOR
;  TITLE OF INVENTION: alpha-INDUCED EXPRESSION OF CELL ADHESION MOLECULES
;  FILE REFERENCE: ISPH-0336
;  CURRENT APPLICATION NUMBER: US/09/209,668A
;  CURRENT FILING DATE: 1998-12-10
;  NUMBER OF SEQ ID NOS: 25
;  SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 7
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: antisense sequence
US-09-209-668-7


  Query Match             0.9%;  Score 18;  DB 3;  Length 20;
  Best Local Similarity   100.0%;  Pred. No. 23;
  Matches   18;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy   1300 gactttggcctggcccgg 1317
          ||||||||||||||||||
Db     20 GACTTTGGCCTGGCCCGG 3


RESULT   4
US-09-287-796-31/c
; Sequence 31, Application US/09287796A
; Patent No. 6133246
; GENERAL INFORMATION:
;  APPLICANT: McKay, Robert A.
;  APPLICANT: Dean, Nicholas M.
;  APPLICANT: Monia, Brett
;  APPLICANT: Nero, Pam
;  APPLICANT: Gaarde, William A.
;  TITLE OF INVENTION: ANTISENSE OLIGONUCLEOTIDE COMPOSITIONS AND METHODS
;  TITLE OF INVENTION: FOR THE MODULATION OF JNK PROTEINS
;  FILE REFERENCE: ISPH-0350
;  CURRENT APPLICATION NUMBER: US/09/287,796A
;  CURRENT FILING DATE: 1999-04-07
;  EARLIER APPLICATION NUMBER: 09/130,616
;  EARLIER FILING DATE: 1998-08-07
;  EARLIER APPLICATION NUMBER: 08/910,629
;  EARLIER FILING DATE: 1997-08-03
;  NUMBER OF SEQ ID NOS: 165
; SEQ ID NO 31
;   LENGTH: 20
;   TYPE: DNA
;   ORGANISM: Artificial Sequence
;   FEATURE:
;   OTHER INFORMATION: Synthetic Sequence
US-09-287-796-31
```

308-1076 file

KW polymerase chain reaction; ss.
XX
OS Synthetic.
XX
PN WO9514772-A1.
XX
PD 01-JUN-1995.
XX
PF 11-NOV-1994; 94WO-JP01916.
XX
PR 12-NOV-1993; 93JP-0355504.
XX
PA (MATS/) MATSUBARA K.
PA (OKUB/) OKUBO K.
XX
PI Matsubara K, Okubo K;
XX
DR WPI; 1995-206931/27.
XX
PT Identifying gene signatures in 3'-directed human cDNA library - e.g.
PT for diagnosis of abnormal cell function, by preparing cDNA that
PT reflects relative abundance of corresp. mRNA in specific human
PT tissues
XX
PS Example 7; Fig 8; 2245pp; Japanese.
XX
CC Primers T41001-T41382 are derived from novel human gene signature (GS)
CC sequences which did not match with sequences deposited in Genbank release
CC 76. The GS sequences (T19001-T26837) were obtained from 3'-directed cDNA
CC libraries prepared from various human tissues; synthesis of cDNA was
CC initiated from the 3'-end of mRNA by using poly(T) as the sole primer.
CC Each library is constructed so as to reflect accurately the relative
CC abundance of different mRNAs in the particular tissue from which it was
CC derived. The appearance frequency of a given GS in a cDNA library can be
CC determined (esp. using primers and probes derived from the GS sequences)
CC as a means of diagnosing abnormal cell function or for recognising
CC different cell types. The primers T41207-8 amplify clone pm0112 which
CC comprises the GS HUMGS001089 (T20089), located on chromosome 20.
XX
SQ Sequence 20 BP; 2 A; 6 C; 4 G; 8 T; 0 other;

Query Match 1.0%; Score 20; DB 16; Length 20;
Best Local Similarity 100.0%; Pred. No. 19;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1673 aacagcagccatgataggga 1692
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Db 20 AACAGCAGCCATGATAGGGA 1

RESULT 22
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ID AAL33024 standard; DNA; 51 BP.
XX
AC AAL33024;
XX
DT 24-JAN-2002 (first entry)
XX
DE Human SNP oligonucleotide #6232.
XX
KW Immunosuppressive; immunostimulatory; antiinflammatory; cytostatic;
KW neuroprotective; antimicrobial; gene therapy; vaccine; amylase; cancer;
KW amyloid protein; angiopoietin; apoptosis related protein; cadherin;
KW cyclin; polymerase; oncogene; histone; kinase; colony stimulating factor;
KW complement related protein; cytochrome; kinesin; cytokine; interferon;
KW interleukin; G-protein coupled receptor; thioesterase; inflammation;
KW multifactorial disease; autoimmune disease; infection;
KW nervous system disease; ss.
XX
OS Homo sapiens.
XX
PN WO200147944-A2.
XX
PD 05-JUL-2001.
XX
PF 28-DEC-2000; 2000WO-US35498.
XX
PR 28-DEC-1999; 99US-0173419.
PR 27-DEC-2000; 2000US-0173419.
XX
PA (CURA-) CURAGEN CORP.
XX
PI Shimkets RA, Leach M;
XX
DR WPI; 2001-465210/50.
XX
PT Polymorphic nucleic acids encoding e.g. amylases, cyclins, polymerases,
PT oncogenes and histones, useful for diagnosing and treating, e.g.
PT cancer, autoimmune diseases and infections -
XX
PS Claim 1; Page 3170; 4143pp; English.
XX
CC The present invention relates to oligonucleotides encoding polymorphic
CC variants of proteins related to amylases, amyloid proteins, angiopoietin,
CC apoptosis related proteins, cadherin, cyclin, polymerase, oncogenes,
CC histones, kinases, colony stimulating factors, complement related
CC proteins, cytochromes, kinesins, cytokines, interferons, interleukins,
CC G-protein coupled receptors and thioesterases. The present sequence is
CC one such oligonucleotide. The oligonucleotides and the peptides encoded
CC by them may be used in the prevention, diagnosis and treatment of
CC diseases associated with inappropriate expression of the proteins listed
CC above. Disorders that may be prevented, diagnosed and/or treated include
CC multifactorial diseases with a genetic component, such as autoimmune
CC diseases (e.g. rheumatoid arthritis, multiple sclerosis, diabetes,
CC systemic lupus erythromatosus and Grave's disease), inflammation, cancer
CC (e.g. cancers of the bladder, brain, breast, colon and kidney,
CC leukaemia), diseases of the nervous system and an infection of pathogenic
CC organisms.
XX
SQ Sequence 51 BP; 7 A; 14 C; 19 G; 11 T; 0 other;

Query Match 0.9%; Score 19; DB 22; Length 51;
Best Local Similarity 100.0%; Pred. No. 61;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1232 actacatccaccgagacct 1250
|||||||||||||||||||
Db 25 ACTACATCCACCGAGACCT 7

RESULT 23
AAL33025/c
ID AAL33025 standard; DNA; 51 BP.
XX
AC AAL33025;
XX
DT 24-JAN-2002 (first entry)
XX
DE Human SNP oligonucleotide #6233.
XX
KW Immunosuppressive; immunostimulatory; antiinflammatory; cytostatic;
KW neuroprotective; antimicrobial; gene therapy; vaccine; amylase; cancer;
KW amyloid protein; angiopoietin; apoptosis related protein; cadherin;
KW cyclin; polymerase; oncogene; histone; kinase; colony stimulating factor;
KW complement related protein; cytochrome; kinesin; cytokine; interferon;
KW interleukin; G-protein coupled receptor; thioesterase; inflammation;
KW multifactorial disease; autoimmune disease; infection;
KW nervous system disease; ss.
XX
OS Homo sapiens.
XX
PN WO200147944-A2.
XX
PD 05-JUL-2001.